Massachusetts Agriculture 1981

Edward J. King,
Governor

John A. Bewick,
Secretary of Environmental Affairs

Frederic Winthrop, Jr.,
Commissioner of Food and Agriculture


AGRICULTURE
is Making
it in
Massachusetts

The Commonwealth of Massachusetts

Department of Food and Agriculture

Leverett Saltonstall Building, Government Center

100 Cambridge Street, Boston 02202

Dear friends of Massachusetts agriculture:

Nowhere do the economic trends of the day have any more impact than down on the farm. The costs of planting, growing, shipping and marketing our food supply are dramatically affected by the economy. In spite of tremendous odds, today's farmers are outproducing most every business in the United States. The result is a boon for consumers-- the provision of an abundant and reasonably priced food supply.

This year I have had the privilege of serving as President of the National Association of State Departments of Agriculture. With the emergence of the "New Federalism", the role of the states in many of our governmental food and farm programs is growing in significance, and I was pleased to help strengthen the partnerships between the various state agriculture departments and the federal agencies. Clearly, one of the main strengths of American agriculture is its tremendous diversity. It is essential that we enhance this diversity by promoting agriculture in every region of the country.

Here in the Northeast, it may be difficult to convince city folk that agriculture is the number one American industry, but it is a fact that agriculture provides more jobs than any other segment of the U.S. economy.

Massachusetts food production is taking on an increasingly important role in our food supply picture. With fuel and transportation costs on the rise, growing food for nearby markets makes more sense each year. Preliminary statistics for vegetable production in 1981 are promising. The sweet corn crop was four per cent larger than the previous year. The tomato and cabbage crops showed similar increases in both acreage and yield per acre.

Notwithstanding a reduction in federal price support levels, milk production has also increased, with production for the last quarter of 1981 showing a four per cent increase over the production of the same quarter a year earlier. And of course, cranberries remain our number one success story with Massachusetts producing nearly one half of the nation's output.

For many years, agriculture has been viewed as the forgotten industry in our "industrial state", but times are changing. More and more suburban and city residents are realizing the irreplaceable value of our farmland and are supporting efforts to keep the land in production.

The Department continues to work hard to encourage a healthy agricultural industry through enlightened regulation, energetic market promotion and farmland protection. You will find from reading this annual report what the Department is doing to meet these goals.

For the statistical report in this publication, we are indebted to the staff of the New England Crop and Livestock Reporting Service, who compiled the charts and statistics under the direction of Charles Hammond and Rowland Scranton. Many thanks to all who have helped in this review of the agricultural industry in Massachusetts.

Sincerely,

Frederic Winthrop, Jr.
Commissioner

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MISCELLANEOUS

SECTION II--ANNUAL REPORT, STATE DEPARTMENT OF FOOD AND AGRICULTURE

Cover: View of the fertile Connecticut River Valley, Sunderland, Massachusetts. Photo courtesy of Pioneer Valley Association.

Inside Cover Photos: (counterclockwise)

At Essex Agricultural and Technical Institute in Hathorne, Governor Edward J. King visits with students and Director Raymond F. Potter.

Governor King signs Executive Order to protect state-owned agricultural land; among those attending 1981 Agriculture Day ceremonies are (l. to r.) State Representative Theodore C. Speliotis of Danvers, State Representative F. John Monahan of Beverly, Secretary of Environmental Affairs John A. Bewick and Food and Agriculture Commissioner Frederic Winthrop, Jr.

Panelists at 1981 Agriculture Day produce and floral wholesaling seminar are (l. to r.) Telemachus Demoulas, President of Demoulas/Market Basket Stores; Angelo Eliopoulos, Demoulas produce buyer; James Segal, Purity Supreme; Robert Zoino, Shaws Supermarkets; Raymond Marcoux, Stop & Shop; George Semanie, Food Marts; Alan Huberman, M. Huberman & Son, flowers; vegetable growers John Bauer of Deerfield, Garabed Dargoonian of Andover and Angelo Arena of Concord;Clive Olson,Olson's Greenhouses.

Bob Downing of Harmony Farm in North Reading sells at a Boston Farmers Market.

Rows of tall and sturdy tomato plants are checked by Albert Volante at his Needham farm.

Cows, cranberries and apples are also growing abundantly in Massachusetts.

MASSACHUSETTS AGRICULTURAL STATISTICS

MASSACHUSETTS DEPARTMENT OF FOOD AND AGRICULTURE

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LIVESTOCK HIGHLIGHTS

CATTLE AND CALVES

Cattle and calves on Massachusetts farms totaled 103,000 head on January 1, 1981, down 1 percent from the total inventory on January 1, 1980. Although the numbers are 7 percent below the inventory of January 1, 1970, it remains 4 percent above the number on hand at the beginning of 1978, the lowest number in the past decade. Dairying is the primary livestock industry in the state with milk cows comprising 43 percent of the total inventory while calves under 500 pounds make up 23 percent.

Beef cows that calved on January 1, 1981 at 10,000 head were unchanged from January 1, 1980, but beef replacement heifers, 500 pounds and over at 4,000 head, were up 1,000 head from January 1, 1980. Steers 500 pounds and over at 4,000 head, were up 1,000 head from the same period the previous year. The value of the cattle and calve inventory climbed close to $81 million, almost $10 million more than the previous year. This is attributed to the continued rise of the value per head to a record high level of $785.

The 1980 calf crop in the Commonwealth totaled 45,000 calves, 2,000 less than during 1979 and the lowest number in the past decade. The number of calves born have been declining steadily since 1972 when 60,000 head were born.

Cash receipts from marketings of cattle and calves in 1980 totaled $10.3 million, 19 percent below 1979, but 50 percent above 1970. There were 17.9 million pounds marketed in 1980, compared with 21.8 million in 1979 and 31.5 million in 1970. Although the average price per hundredweight was lower in 1980 than in 1979, it was more than double the average price in 1970.

HOGS AND PIGS

The inventory of hogs and pigs on farms totaled 49,000 head on December 1, 1980, down 18 percent from December 1, 1979 and the smallest of record. The inventory included 14 percent breeding animals and 86 percent of animals intended for market. The value of the December 1, 1980 inventory totaled $3.7 million, up 10 percent from December 1, 1979, but down 20 percent from December 1, 1978. The average value per head was $74.50 on December 1, 1980, up from the $55.50 on January 1, 1979 and the $76.50 on January 1, 1978.

The 1980 pig crop at 65,000 head was down 20 percent from the 81,000 pigs in 1979. Sows' farrowing for the year at 10,000 head, were down 2,500 from the 12,500 sows that farrowed in 1979. The litter size in 1980 averaged 6.5, unchanged from 1979. The spring (December-May) pig crop for 1980 totaled 30,000,

down 23 percent from the 1979 spring crop. The 4,000 sows farrowed produced an average 7.4 pigs per litter. The 1980 fall (June-November) pig crop totaled 35,000 pigs, down 17 percent from a year ago. There were 6,000 sows farrowed averaging 5.8 pigs per litter.

Hog production totaled 16.4 million pounds during 1980, down 12 percent from 1979 and the second lowest yearly production of record. The hog production in 1977 was 15.8 million pounds. The gross income from hog production in 1980 was $6.5 million, down 20 percent from 1979. Farmers marketed 16.2 million pounds of hogs in 1980, down 9 percent from 1979 and the second lowest marketings of record. The farmers marketed 14.1 million pounds of hogs in 1977. Cash receipts from marketings totaled $6.0 million, down 24 percent from 1979 and except for 1977, the lowest since 1972. The decrease in cash receipts from 1979 was due to both a decrease in marketings and a lower price per pound. Farmers received $37.00 per cwt. of hogs in 1979, down $7.00 from the $44.00 received in 1979 and the lowest price since 1977.

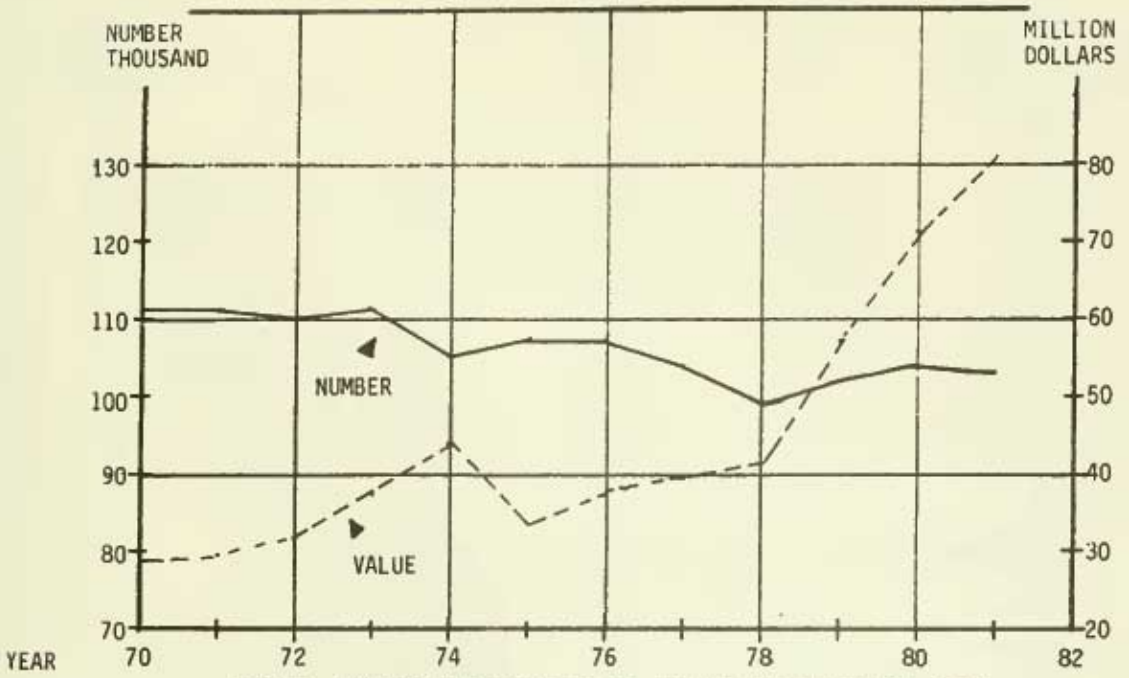
SHEEP AND LAMBS

Sheep and lambs in Massachusetts on January 1, 1981 totaled 7,200 head, 1 percent above January 1, 1980 and the largest since 1976. Inventory value of the January 1, 1981 flock at $634,000 was up 14 percent from January 1, 1980 due to increases in both inventory numbers and value per head. The January 1, 1981 value per head was $88.00, up from the $78.50 value per head on January 1, 1980 and the highest on record. The lamb crop in 1980 totaled 5,600, up 10 percent from the lamb crop in 1979. There were 428,000 pounds of lamb and mutton produced during 1980, up 12 percent from the 1979 production of 382,000 pounds. Gross income from the 1980 sheep and lamb production was $268,000, up from the 1979 gross income of $245,000, but down from the 1978 gross income of $282,000. Sheep and lamb marketings in 1980 totaled 300,000 pounds, up from the 246,000 pounds marketed in 1979, but down from the 329,000 pounds marketed in 1978. The cash receipts from marketings was $179,000, up from $163,000 in 1979, but down from $215,000 in 1978. The 1980 market prices for sheep rose $3.00 to $42.00 per hundred pounds from the 1979 market prices, but the 1980 market price for lambs decreased $8.00 to $77.00 per hundred pounds from the 1979 market price.

WOOL

Wool production at 47,000 pounds in 1980 was up 2,000 pounds from the 1979 production and the largest production since 1974. Sheep shorn in 1980 totaled 6,800 head, up 200 from the 1979 total and the largest number shorn since 1976. Weight per fleece averaged 6.9 pounds, up from the 6.8 pounds per fleece in 1979. The value of the wool production in 1980 was $41,000, up from the $38,000 in 1979 and the largest since 1966 value of production of $43,000. Farmers received 88¢ per pound of wool in 1980, up 4¢ per pound from 1979 and the highest price on record.

MASSACHUSETTS CATTLE
INVENTORY, NUMBER AND VALUE



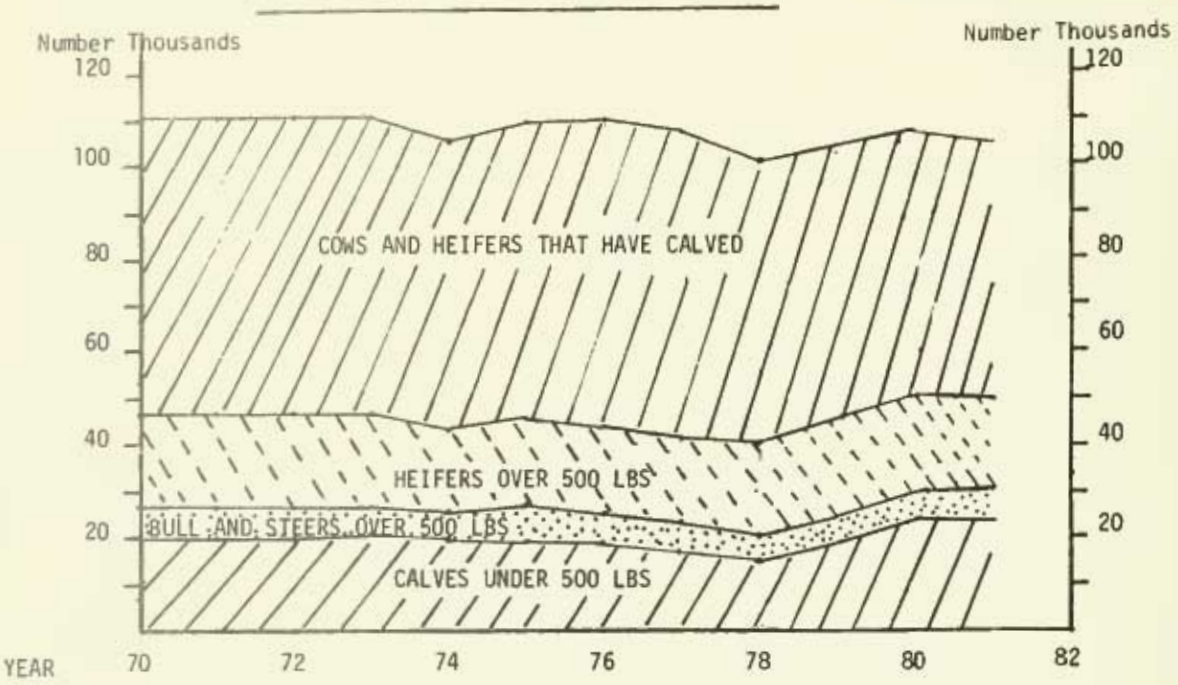
CATTLE: NUMBER AND VALUE OF ALL CATTLE AND CALVES ON FARMS
JANUARY 1, MASSACHUSETTS, 1971-1981

YEAR	NUMBER	VALUE	
		PER HEAD	TOTAL
	1,000 HEAD	DOLLARS	1,000 DOLLARS
1971	111	270.00	29,970
1972	110	290.00	31,900
1973	111	335.00	37,185
1974	105	420.00	44,100
1975	107	315.00	33,705
1976	107	345.00	36,915
1977	104	380.00	39,520
1978	99	415.00	41,085
1979	102	560.00	57,120
1980	104	685.00	71,240
1981	103	785.00	80,855

CATTLE: JANUARY 1, INVENTORY BY CLASSES, MASSACHUSETTS, 1971-1981

YEAR	ALL CATTLE AND CALVES	COWS & HEIFERS THAT HAVE CALVED		HEIFERS 500 LBS. AND OVER			STEERS 500 LBS.+	BULLS 500 LBS.+	STEERS, HEIFERS & BULLS -500 LBS.
		BEEF	MILK	BEEF COW REPLACEMENTS	MILK COW REPLACEMENTS	OTHER			
					1,000 HEAD				
1971	111	7	60	2	15	2	2	2	21
1972	110	8	58	2	15	2	2	2	21
1973	111	8	57	2	16	2	2	2	22
1974	105	8	54	2	15	2	2	2	20
1975	107	9	54	2	17	1	3	2	19
1976	107	9	55	2	17	1	3	2	18
1977	104	9	53	2	17	1	2	2	18
1978	99	8	51	2	16	1	2	2	17
1979	102	10	49	3	16	1	2	2	19
1980	104	10	45	3	16	1	3	2	24
1981	103	10	44	4	14	1	4	2	24

MASSACHUSETTS CATTLE INVENTORY NUMBERS



CATTLE AND CALVES: INVENTORY, SUPPLY, AND DISPOSITION, MASSACHUSETTS, 1970-1980

YEAR	ON HAND JAN. 1 ALL CATTLE	CALF CROP	INSHIPMENTS	MARKETINGS 1/ CATTLE	MARKETINGS 1/ CALVES	FARM SLAUGHTER CATTLE & CALVES	DEATHS CATTLE	DEATHS CALVES
				1,000 HEAD				
1970	111	60	13	28	38	1	2	4
1971	111	60	12	29	37	1	2	4
1972	110	60	11	29	33	1	2	5
1973	111	57	10	33	30	1	3	6
1974	105	55	8	27	26	1	2	5
1975	107	56	7	32	22	1	2	6
1976	107	55	7	34	22	1	2	6
1977	104	52	7	35	20	1	2	6
1978	99	50	5	23	19	2	2	6
1979	102	47	1	19	18	1	2	6
1980	104	45	1	15	21	1	3	7

1/ Excludes interfarm sales.

CATTLE AND CALVES: PRODUCTION AND INCOME, MASSACHUSETTS, 1970-1980

YEAR	PRODUCTION	MARKETINGS	PRICE PER 100 LBS. CATTLE	PRICE PER 100 LBS. CALVES	CASH RECEIPTS	VALUE OF HOME CONSUMPTION	GROSS INCOME
	1,000 POUNDS		DOLLARS			1,000 DOLLARS	
1970	22,430	31,456	20.80	30.50	6,852	340	7,192
1971	23,175	32,495	21.10	28.00	7,080	363	7,443
1972	24,660	32,020	24.20	34.00	8,025	416	8,441
1973	28,875	40,115	33.50	44.00	13,717	576	14,293
1974	30,405	32,845	27.50	28.00	9,043	473	9,516
1975	35,060	37,820	22.70	23.80	8,606	488	9,094
1976	33,620	40,230	26.00	28.50	10,512	599	11,071
1977	33,240	40,790	26.20	38.20	10,915	676	11,591
1978	27,080	26,560	41.90	57.00	11,405	1,441	12,846
1979	21,340	21,754	57.00	76.00	12,728	1,520	14,248
1980	18,890	17,890	55.00	71.00	10,299	1,656	11,955

HOGS: PRODUCTION AND INCOME, MASSACHUSETTS, 1970-1980

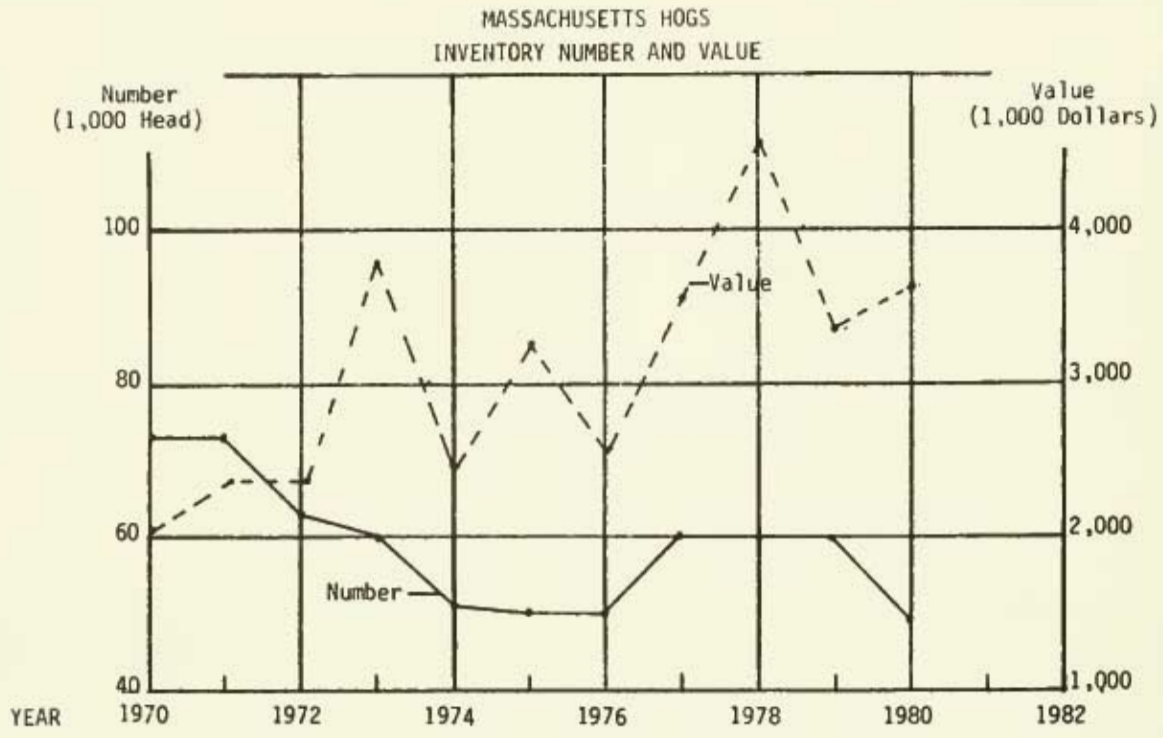
YEAR	PRODUCTION	MARKETING	PRICE PER 100 POUNDS	CASH RECEIPTS	VALUE OF HOME CONSUMPTION	GROSS INCOME
	1,000 POUNDS		DOLLARS		1,000 DOLLARS	
1970	19,139	19,998	18.50	3,540	81	3,781
1971	19,746	19,556	17.50	3,422	77	3,499
1972	19,191	19,835	25.00	4,959	110	5,069
1973	18,862	18,068	37.00	6,685	171	6,856
1974	18,764	19,910	33.00	6,570	254	6,824
1975	19,100	18,260	45.00	8,217	347	8,564
1976	17,891	17,378	45.00	7,820	354	8,174
1977	15,832	14,063	37.00	5,203	291	5,494
1978	17,211	16,640	45.00	7,488	304	7,792
1979	18,640	17,820	44.00	7,841	297	8,138
1980	16,412	16,185	37.00	5,988	500	6,488

HOGS: INVENTORY NUMBERS, PIG CROP AND DISPOSITION, MASSACHUSETTS, 1970-1980

YEAR	ON HAND DEC. 1 PREV. YEAR	PIG CROP		MARKETINGS 1/	FARM SLAUGHTER	DEATHS
		DEC.-MAY	JUNE-NOV.			
	1,000 HEAD				1,000 HEAD	
1970	83	46	47	90	1	12
1971	73	51	47	88	1	9
1972	73	44	43	89	1	7
1973	63	42	43	80	1	7
1974	60	42	41	82	1	6
1975	51	43	39	78	1	4
1976	50	45	37	75	1	6
1977	50	35	43	61	1	6
1978	60	36	41	71	1	5
1979	60	39	42	76	1	4
1980	60	30	35	71	2	3

PIG CROP: SOWS FARROWED AND PIGS SAVED, MASSACHUSETTS, 1970-1980

YEAR	SPRING FARROWINGS			FALL FARROWINGS		
	SOWS (1,000 HEAD)	PIGS PER LITTER	PIGS SAVED PER 1,000	SOWS (1,000 HEAD)	PIGS PER LITTER	PIGS SAVED PER 1,000
1970	7.4	6.2	46	7.8	6.0	47
1971	7.6	6.7	51	7.4	6.3	47
1972	7.0	6.3	44	7.0	6.2	43
1973	7.0	6.0	42	7.1	6.0	43
1974	7.0	6.0	42	6.8	6.0	41
1975	7.0	6.2	43	6.8	5.7	39
1976	6.6	6.8	45	5.7	6.5	37
1977	5.0	6.9	35	6.5	6.6	43
1978	5.0	7.2	36	6.0	6.8	41
1979	6.0	6.5	39	6.5	6.5	42
1980	4.0	7.4	30	6.0	5.8	35



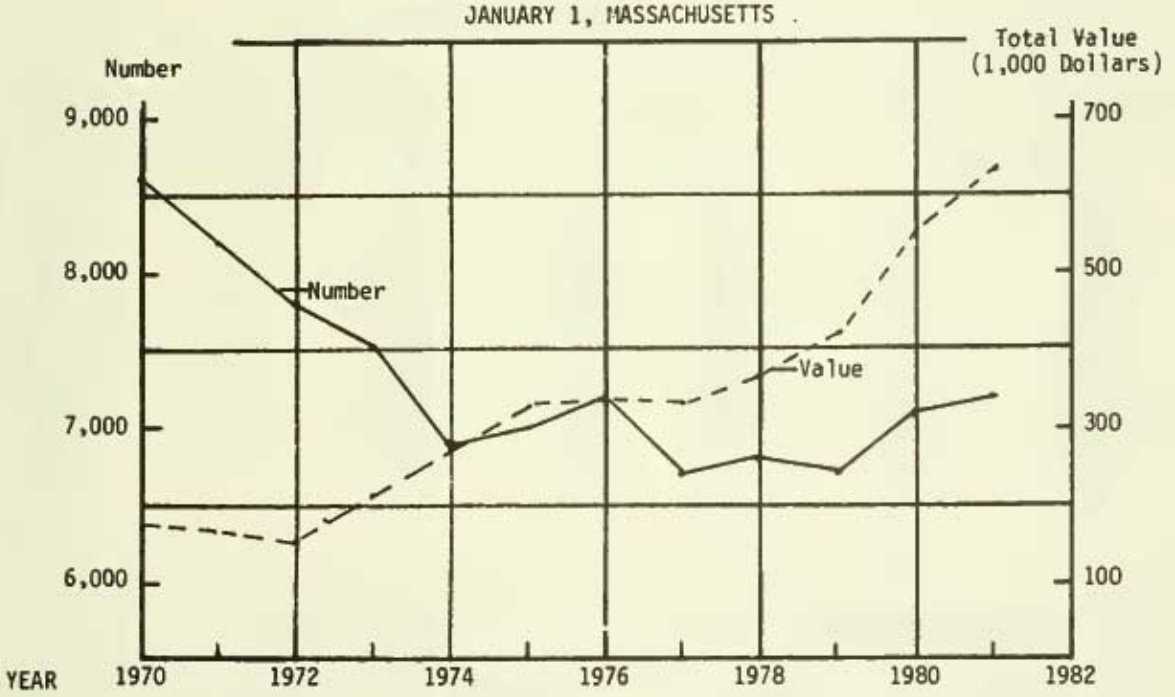
HOGS: NUMBER AND VALUE OF HOGS ON FARMS DECEMBER 1, MASSACHUSETTS 1970-1980

YEAR	NUMBER			VALUE	
	BREEDING	MARKET	TOTAL	PER HEAD	TOTAL
		1,000 HEAD		DOLLARS	1,000 DOLLARS
1970	11	62	73	28.50	2,081
1971	9	64	73	32.00	2,336
1972	9	54	63	37.50	2,363
1973	10	50	60	62.50	3,750
1974	8	43	51	48.00	2,448
1975	8	42	50	64.50	3,225
1976	7	43	50	50.50	2,525
1977	8	52	60	59.50	3,570
1978	8	52	60	76.50	4,590
1979	9	51	60	55.50	3,330
1980	7	42	49	74.50	3,651

SHEEP AND LAMBS: NUMBER AND VALUE ON FARMS,
JANUARY 1, MASSACHUSETTS, 1971-1981

YEAR	NUMBER	VALUE	
		PER HEAD	TOTAL
	1,000 HEAD	DOLLARS	1,000 DOLLARS
1971	8.2	20.00	164
1972	7.8	20.00	156
1973	7.5	28.00	210
1974	6.9	40.00	276
1975	7.0	46.50	326
1976	7.2	46.00	331
1977	6.7	48.00	322
1978	6.8	53.50	364
1979	6.7	63.00	422
1980	7.1	78.50	557
1981	7.2	88.00	634

SHEEP & LAMBS: NUMBER AND VALUE
JANUARY 1, MASSACHUSETTS



SHEEP AND LAMBS: INVENTORY NUMBER BY CLASS, JANUARY 1, MASSACHUSETTS, 1971-1981

YEAR	ALL SHEEP AND LAMBS	LAMBS			ONE YEAR AND OVER	
		ALL LAMBS	EWES	WETHERS AND RAMS	EWES	WETHERS AND RAMS
				1,000 HEAD		
1971	8.2	1.7	1.4	.3	5.9	.6
1972	7.8	1.4	1.0	.4	5.8	.6
1973	7.5	1.4	1.0	.4	5.5	.6
1974	6.9	1.4	1.0	.4	5.0	.5
1975	7.0	1.4	1.1	.4	5.1	.4
1976	7.2	1.5	1.1	.4	5.3	.4
1977	6.7	1.4	1.0	.4	4.9	.4
1978	6.8	1.6	1.1	.5	4.7	.5
1979	6.7	1.3	1.0	.3	4.9	.5
1980	7.1	1.6	1.2	.4	5.0	.5
1981	7.2	1.6	1.2	.4	5.1	.5

SHEEP AND LAMBS: INVENTORY NUMBERS, LAMB CROP AND DISPOSITION, MASSACHUSETTS 1970-1980

YEAR	ON HAND JAN. 1 ALL SHEEP AND LAMBS	LAMB CROP	MARKETING		FARM SLAUGHTER SHEEP AND LAMBS	DEATHS SHEEP AND LAMBS
			SHEEP	LAMBS		
	1,000 HEAD					
1970	8.6	6.2	1.6	3.2	.1	1.3
1971	8.2	6.2	1.5	2.8	.3	1.1
1972	7.8	5.6	1.3	2.9	.2	1.1
1973	7.5	5.3	1.4	2.7	.4	1.1
1974	6.9	5.2	.5	2.4	.2	1.1
1975	7.0	5.5	.9	2.9	.4	1.1
1976	7.2	5.6	1.5	3.3	.3	1.0
1977	6.7	5.7	.8	3.4	.4	1.0
1978	6.8	5.3	1.0	2.9	.5	1.0
1979	6.7	5.1	.8	2.5	.5	.9
1980	7.1	5.6	1.2	2.7	.6	1.0

SHEEP AND LAMBS: PRODUCTION AND INCOME, MASSACHUSETTS, 1970-1980

YEAR	PRODUCTION	MARKETINGS	PRICE PER 100 LBS.		CASH RECEIPTS	VALUE OF HOME CONSUMPTION	GROSS INCOME
			SHEEP	LAMBS			
	1,000 POUNDS		DOLLARS			1,000 DOLLARS	
1970	391	454	8.40	26.00	80	3	89
1971	440	443	10.00	25.50	91	9	100
1972	382	397	12.00	32.50	98	7	105
1973	366	395	14.00	41.00	112	21	133
1974	349	318	17.00	37.00	91	10	101
1975	372	296	26.00	68.00	158	35	193
1976	382	393	28.00	72.00	209	35	244
1977	431	357	29.00	72.00	198	46	244
1978	406	329	38.00	84.00	215	67	282
1979	382	246	39.00	85.00	163	82	245
1980	428	300	42.00	77.00	179	89	268

WOOL: FARM PRODUCTION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

YEAR	SHEEP SHORN	WEIGHT PER FLEECE	SHORN WOOL PRODUCTION	PRICE PER POUND	VALUE
	1,000 HEAD	POUNDS	1,000 POUNDS	CENTS	1,000 DOLLARS
1970	7.9	7.2	57	41	23
1971	7.7	6.9	53	31	16
1972	7.2	7.2	52	34	18
1973	6.9	7.2	50	71	36
1974	6.6	7.4	49	62	30
1975	6.4	7.2	46	31	14
1976	6.7	6.9	46	60	28
1977	6.2	7.1	44	78	34
1978	6.3	6.8	43	74	32
1979	6.6	6.8	45	84	38
1980	6.8	6.9	47	88	41

MISCELLANEOUS LIVESTOCK

BEES AND HONEY

Apiarists in Massachusetts kept 12,000 bee colonies in 1980, unchanged since 1974. There were 288,000 pounds of honey produced in 1980, down 27 percent from 1979 and 31 percent lower than 1978. The decreased production was mostly due to bad weather for bees making honey. Yield per colony in 1980 was 24 pounds compared to 33 pounds in 1979 and 35 pounds in 1980. The 1980 value of production of honey was $294,000, down from the $329,000 in 1979 and $433,000 in 1978.

BEES, HONEY AND BEESWAX: COLONIES OF BEES, PRODUCTION, PRICE PER POUND AND VALUE OF PRODUCTION, MASSACHUSETTS, 1971-1980

YEAR	COLONIES OF BEES	HONEY				BEESWAX		
		Yield Per Colony	Production	Price Per Pound	Value Of Production	Production	Price Per Pound	Value Of Production
	1,000	Pounds	1,000 Pounds	Cents	1,000 Dollars	1,000 Pounds	Cents	1,000 Dollars
1971	9	25	225	42.2	95	5	80	4
1972	9	19	171	50.0	86	3	75	2
1973	9	26	234	66.8	156	4	90	4
1974	12	16	192	81.2	156	4	110	4
1975	12	27	324	96.9	314	8	110	9
1976	12	19	228	101.0	230	4	110	4
1977	12	22	264	103.0	272	5	150	8
1978	12	35	420	103.0	433	6	160	10
1979	12	33	396	83.1	329	6	160	10
1980	12	24	288	102.0	294	6	185	11

MINK

Mink pelt production in Massachusetts in 1980 totaled 17,400 pelts, 600 fewer than the total produced in 1979. Of the pelts produced in 1980, 36 percent were pastel, 30 percent were demibuff and 13 percent were pearl. Mink females bred to produce kits in 1981 totaled 3,900, only 75 percent of the bred females for the 1980 crop.

MINK: PRODUCTION, RANCHES AND FEMALES BRED TO PRODUCE KITS, MASSACHUSETTS, 1978-1981

COLOR CLASS	PELTS PRODUCED			RANCHES			FEMALES BRED TO PRODUCE KITS			
	1978	1979	1980	1978	1979	1980	1978	1979	1980	1981
Demibuff	5,400	4,900	5,200				1/	1/	1,500	1,000
Pastel	6,500	5,400	6,300				3,200	2,600	1,500	1,000
Pearl	1/	2,500	2,300		N.A.		1/	800	730	700
Standard	1,500	1,600	1,200				1/	690	700	660
Others	6,600	3,600	2,400				2,500	1,310	970	540
TOTAL	20,000	18,000	17,400	16	12	14	5,700	5,400	5,200	3,900

1/ Included in Others to avoid disclosing individual operations.

DAIRY HIGHLIGHTS

MILK PRODUCTION

Milk production in Massachusetts during 1980 totaled 565 million pounds, slightly lower than the previous year's production of 566 million pounds. Production per cow at 12,283 pounds continued an upward trend that started in 1974 and has set new records each of the last two years.

MILK DISPOSITION AND BLEND PRICE

Dairymen in Massachusetts marketed a total of 556 million pounds of milk during 1980, equaling the 1979 total. Of the total amount marketed, 14.4 million quarts were retailed directly to consumers by farmers. Milk used on farms totaled 9.0 million pounds, of which 4.0 million pounds were for food and drink, unchanged from 1979 and 5.0 million pounds were fed to calves, 1 million pounds below the 1979 level.

The annual wholesale milk blend price averaged $13.70 per hundredweight for 1980, 90¢ higher than in 1979. The blend price during the year had a low of $12.80 per hundredweight in June and a high of $14.80 in November. The total value of milk produced in 1980 was $80.6 million, up $5.4 million from the 1979 total.

MANUFACTURED DAIRY PRODUCTS

A total of 5.1 million pounds of cheese was produced in Massachusetts during 1980, down 18 percent from the 1979 production of 6.3 million pounds. Ice cream production totaled 44 million gallons, almost 4 percent more than the 1979 production. There was 9.8 million gallons produced in 1980, down 6 percent from the previous year. Milk sherbet production totaled 2 million gallons, 163,000 gallons more than in 1979.

MASSACHUSETTS MILK COWS ON FARMS, BY QUARTERS, 1971-1980

MONTH	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
	Thousands of Head									
MAR 31	60	58	56	54	55	55	52	50	49	46
JUN 30	59	57	55	54	54	54	51	48	48	46
SEP 30	58	57	54	54	54	53	51	47	47	46
DEC 31	58	57	54	54	55	53	51	46	46	45
ANNUAL	59	57	55	54	55	54	51	49	48	46

MASSACHUSETTS MILK PRODUCTION PER COW, BY QUARTERS, 1971-1980

MONTH	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
	Pounds									
JAN - MAR	2,700	2,793	2,714	2,704	2,725	2,735	2,850	2,900	2,920	3,109
APR - JUN	2,949	2,965	2,880	2,891	2,960	2,950	3,060	3,110	3,090	3,220
JUL - SEP	2,810	2,649	2,612	2,673	2,720	2,760	2,890	2,920	2,940	3,000
OCT - DEC	2,694	2,628	2,612	2,713	2,620	2,700	2,870	2,820	2,980	3,020
ANNUAL	11,153	11,035	10,818	10,981	10,927	11,074	11,706	11,673	11,792	12,283

MASSACHUSETTS MILK PRODUCTION, BY QUARTERS. 1971-1980

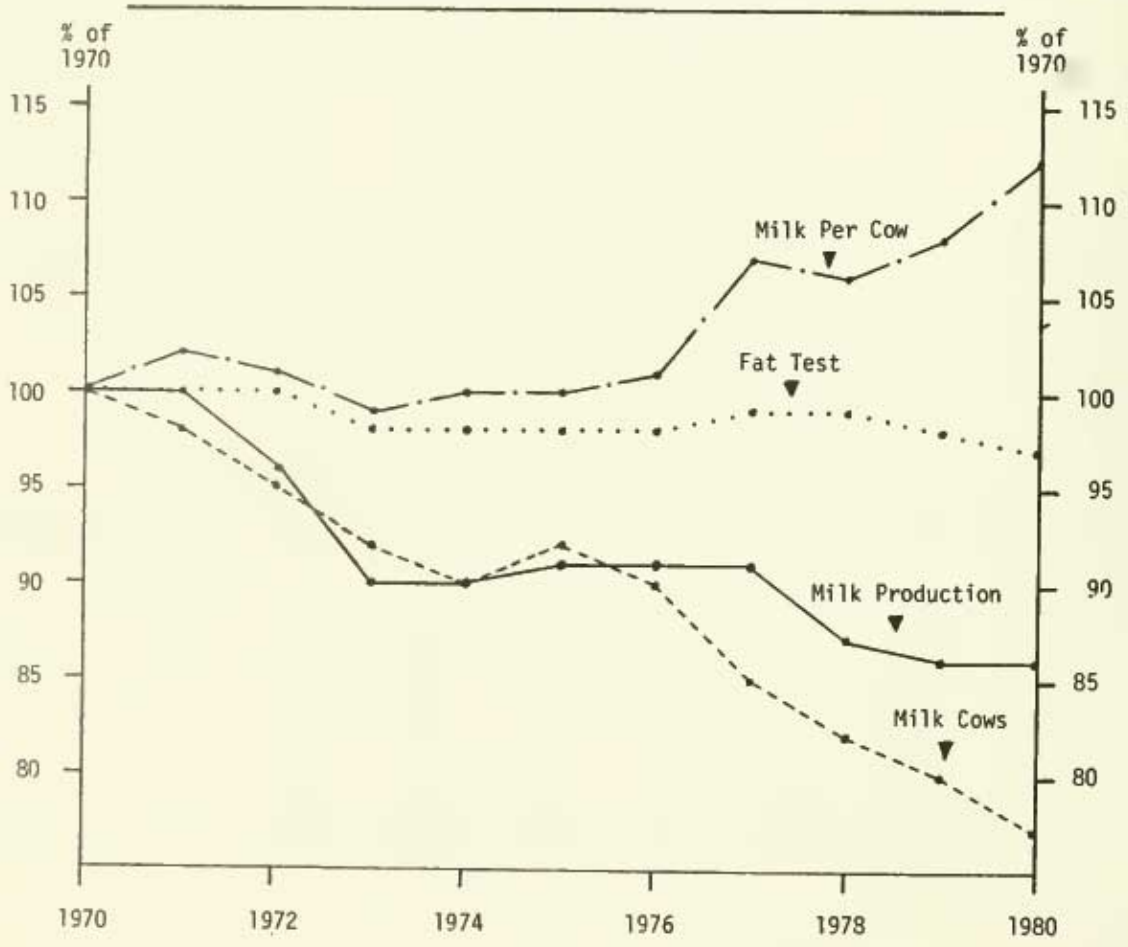
MONTH	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
	Million Pounds									
MAR	162	162	152	146	150	150	148	145	143	143
JUN	174	169	161	159	160	159	156	149	148	148
SEP	163	151	141	147	147	146	147	140	138	138
DEC	159	147	141	141	144	143	146	138	137	136
ANNUAL	658	629	595	593	601	598	597	572	566	565

MILK: FARM PRODUCTION AND VALUE OF MILK AND MILK PRODUCTS SOLD, MASSACHUSETTS, 1970-1980

YEAR	NUMBER OF MILK COWS ON FARMS 1/	PRODUCTION 2/					FARM VALUE OF MILK PRODUCED 3/
		PER MILK COW		PERCENTAGE OF FAT IN ALL MILK PRODUCED	TOTAL		
		MILK	MILKFAT		MILK	MILKFAT	
	Thousands	Pounds		Percent	Million Pounds		1,000 Dollars
1970	60	10,967	408	3.72	658	24	48,758
1971	59	11,153	414	3.71	658	24	49,218
1972	57	11,035	409	3.71	629	23	48,370
1973	55	10,818	395	3.65	595	22	51,646
1974	54	10,981	402	3.66	593	22	59,241
1975	55	10,927	404	3.63	601	22	61,122
1976	54	11,074	405	3.66	598	22	67,215
1977	51	11,706	431	3.68	597	22	67,103
1978	49	11,673	437	3.67	572	21	68,406
1979	48	11,792	429	3.64	566	21	75,165
1980	46	12,283	443	3.61	565	20	80,569

1/ Average number on farms during year, excluding heifers not yet fresh.
2/ Excludes milk sucked by calves.
3/ Valued at average returns per 100 pounds of milk in combined marketings of milk and cream, includes value of milk fed to calves.

TREND IN MILK COWS, PRODUCTION AND FAT TEST, MASSACHUSETTS, 1971 - 1980



MILK: QUANTITY MARKETED, PRICE AND CASH RECEIPTS, MASSACHUSETTS, 1970-1980

YEAR	SOLD TO PLANTS			SOLD DIRECTLY TO CONSUMERS			COMBINED MARKETINGS		
	QUANTITY	PRICE PER CWT.	CASH RECEIPTS	QUANTITY	PRICE PER QUART	CASH RECEIPTS	QUANTITY	PRICE PER CWT.	CASH RECEIPTS
	Million Pounds	Dollars	1,000 Dollars	Million Quarts	Cents	1,000 Dollars	Million Pounds	Dollars	1,000 Dollars
1970	595	6.82	40,579	23.3	31.0	7,209	645	7.41	47,788
1971	600	6.96	41,760	20.9	31.0	6,488	645	7.48	48,248
1972	580	7.23	41,934	17.2	32.0	5,507	617	7.69	47,441
1973	550	8.22	45,210	15.3	35.0	5,372	583	8.68	50,582
1974	550	9.50	52,250	14.4	40.0	5,768	581	9.99	58,018
1975	555	9.65	53,558	15.8	40.0	6,326	589	10.17	59,884
1976	550	10.70	58,850	16.7	42.0	7,032	586	11.24	65,882
1977	550	10.70	58,850	16.7	42.0	7,032	586	11.24	65,882
1978	530	11.50	60,950	14.9	43.0	6,400	562	11.98	67,350
1979	525	12.80	67,200	14.4	46.0	6,633	556	13.28	73,833
1980	525	13.70	71,925	14.4	51.0	7,354	556	14.26	79,279

MILK: QUANTITIES USED AND MARKETED BY FARMERS, MASSACHUSETTS, 1970-1980

YEAR	TOTAL PRODUCED	MILK USED ON FARMS WHERE PRODUCED			MILK MARKETED BY FARMERS		
		USED FOR MILK, CREAM AND BUTTER	FED TO CALVES	TOTAL	SOLD TO PLANTS AND DEALERS	SOLD DIRECTLY TO CONSUMERS	TOTAL
	Million Pounds						
1970	658	8	5	13	595	50	645
1971	658	8	5	13	600	45	645
1972	629	7	5	12	580	37	617
1973	595	7	5	12	550	33	583
1974	593	7	5	12	550	31	581
1975	601	7	5	12	555	34	589
1976	598	7	5	12	550	36	586
1977	597	6	5	11	550	36	586
1978	572	4	5	9	530	32	562
1979	566	4	6	10	525	31	556
1980	565	4	5	9	525	31	556

MILK: SOLD TO PLANTS, MONTHLY AND ANNUAL AVERAGE PRICE PER 100 POUNDS RECEIVED BY FARMERS, MASSACHUSETTS, 1970-1980

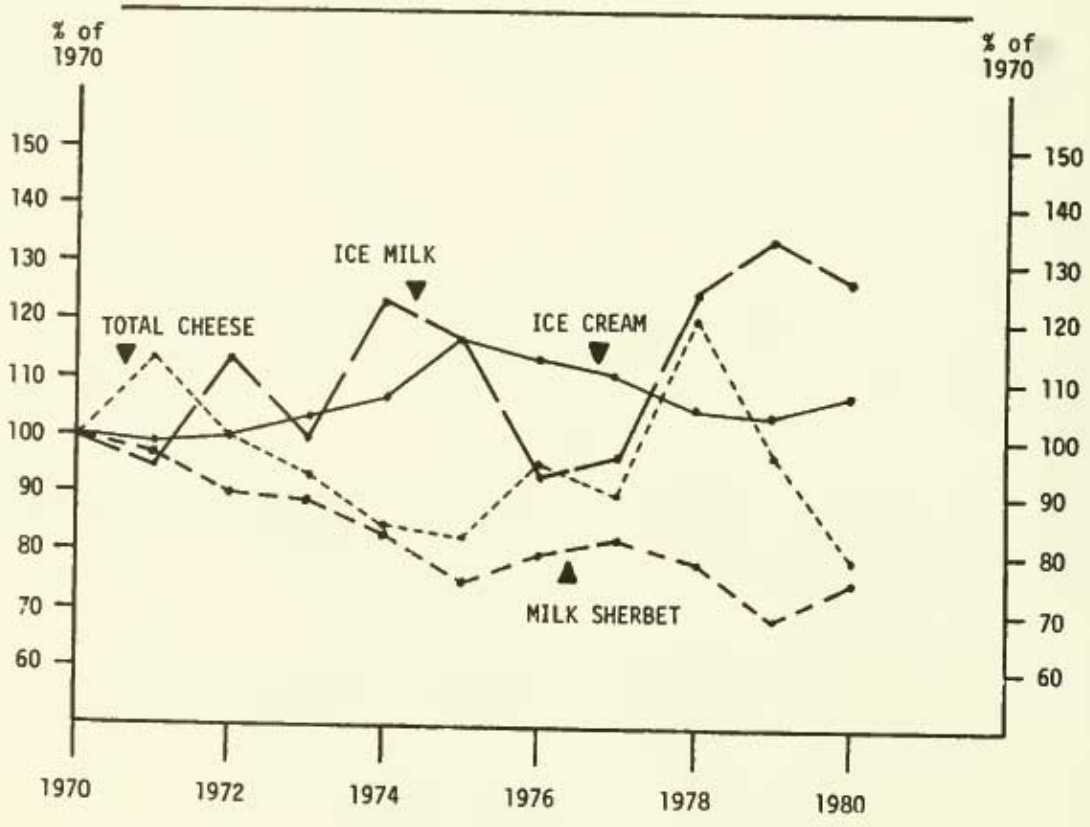
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE
	Dollars												
1970	6.95	6.85	6.65	6.50	6.30	6.20	6.65	6.90	7.15	7.35	7.30	7.20	6.82
1971	7.05	7.00	6.90	6.65	6.45	6.30	6.70	7.00	7.30	7.40	7.45	7.25	6.94
1972	7.20	7.25	7.00	6.75	6.65	6.50	6.95	7.45	7.75	7.95	7.95	7.65	7.24
1973	7.70	7.75	7.55	7.30	7.15	7.20	7.75	8.55	9.25	9.55	9.80	9.70	8.22
1974	9.80	9.90	9.85	9.80	9.25	8.50	8.90	9.40	9.70	9.80	10.00	9.45	9.50
1975	9.05	9.00	8.75	8.60	8.35	8.35	9.00	9.60	10.30	10.80	11.10	11.20	9.45
1976	11.10	10.80	10.70	10.00	9.90	9.75	10.40	11.00	11.30	11.50	11.20	11.70	10.70
1977	10.60	10.50	10.20	10.20	9.90	10.00	10.50	10.90	11.20	11.40	11.40	11.20	10.65
1978	11.10	11.20	11.00	10.70	10.70	10.60	11.00	11.60	12.10	12.70	12.90	12.70	11.50
1979	12.70	12.80	12.50	12.20	12.00	12.00	12.50	13.10	13.40	13.80	13.90	13.40	12.80
1980	13.60	13.40	13.30	13.00	13.00	12.80	13.30	13.70	14.20	14.70	14.80	14.70	13.70

MANUFACTURED DAIRY: PRODUCTION MAJOR PRODUCTS, MASSACHUSETTS, 1970-1980

YEAR	TOTAL CHEESE 1/	ICE CREAM	ICE MILK 2/	MILK SHERBET 2/
	1,000 Pounds		1,000 Gallons	
1970	6,430	40,944	7,822	2,645
1971	7,268	40,455	7,514	2,556
1972	6,416	41,025	8,802	2,393
1973	5,976	42,302	7,742	2,330
1974	5,412	43,607	9,611	2,186
1975	5,288	47,761	9,177	1,985
1976	6,123	46,320	7,246	2,116
1977	5,786	45,255	7,483	2,180
1978	7,780	42,909	9,779	2,102
1979	6,255	42,463	10,454	1,829
1980	5,099	43,986	9,817	1,992

1/ Excluding cottage cheese.
2/ Includes hard and soft-serve and freezer-made milk shake.

PRODUCTION TRENDS FOR CHEESE, ICE CREAM, ICE MILK AND MILK SHERBET, MASSACHUSETTS, 1970-1980



POULTRY HIGHLIGHTS

CHICKENS

The December 1, 1980 inventory of chickens on farms (excluding broilers) in Massachusetts totaled 1.8 million birds, a 4 percent rise over a year ago, and 13 percent above the inventory on December 1, 1978. The inventory revealed that the number of hens of laying age on December 1, 1980 increased 4 percent, while the number of pullets of laying age jumped 7 percent over 1979 levels. Total value of all chickens on hand in the state on December 1, also rose from a year ago, reaching $4.1 million. The increase was partially a result of a larger 1980 inventory and as a result of an increase in the per head value of the birds. Poultrymen marketed 3.9 million pounds of poultry during 1980 at 8.3 cents per pound compared to 5.0 million pounds at 13.2 cents per pound the previous year.

EGGS

Massachusetts egg production was 326 million in 1980, down 4 percent from the previous year and also the lowest amount in 10 years. The decline in egg production parallels the general decline in layer numbers over the past decade. The annual average number of hens and pullets of laying age on hand in 1980 was reduced to 1.3 million, 3 percent below 1979. Gross income to egg producers was $20.2 million, down 3 percent from the previous year.

TURKEYS

Massachusetts farmers raised 126,000 turkeys during 1980, down from 140,000 the year before. With the 1980 price per pound reaching 78.0 cents. The value of production increased to $1.9 million. The 1980 price per pound was 13.0 cents above the 1979 price per pound.

CHICKENS: NUMBER, VALUE, AND CLASSES OF CHICKENS ON FARMS
DECEMBER 1, MASSACHUSETTS 1970-1980

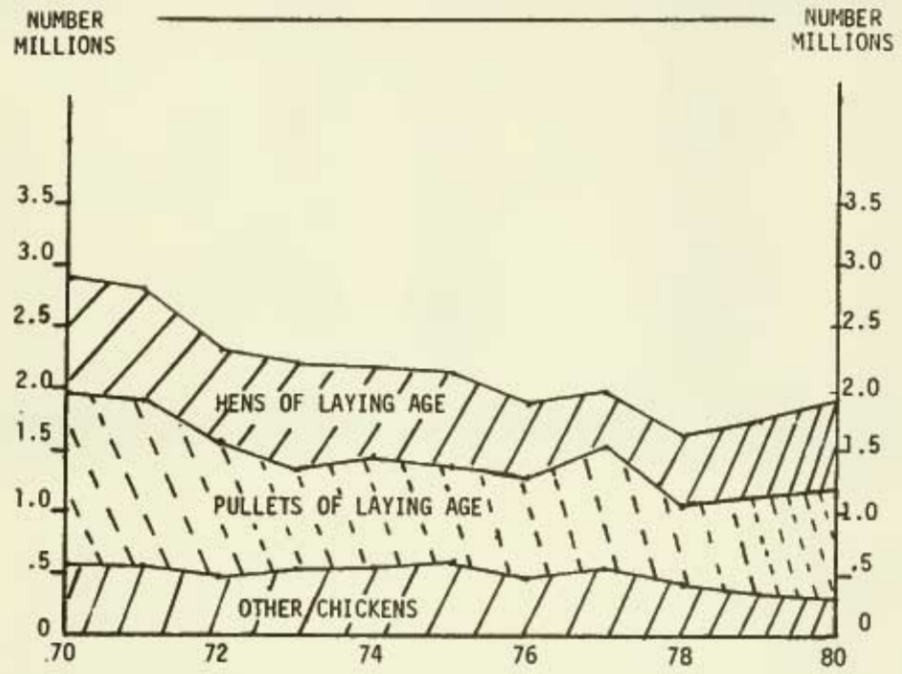
YEAR	ALL CHICKENS	VALUE		HENS AND PULLETS OF LAYING AGE		OTHER CHICKENS
		PER HEAD	TOTAL	HENS	PULLETS	
	1,000 HEAD	DOLLARS	1,000 DOLLARS	1,000 HEAD		
1970	2,852	1.90	5,419	884	1,415	553
1971	2,769	1.85	5,171	886	1,313	570
1972	2,279	1.40	4,280	729	1,069	481
1973	2,240	2.00	4,480	896	807	537
1974	2,237	2.10	4,698	772	939	526
1975	2,091	2.35	4,914	725	786	580
1976	1,870	2.40	4,488	593	782	495
1977	1,990	2.05	4,080	465	1,005	520
1978	1,580	2.05	3,239	550	620	410
1979	1,726	2.15	3,711	617	755	354
1980	1,790	2.30	4,117	644	811	335

CHICKENS: PRODUCTION, DISPOSITION, CASH RECEIPTS AND GROSS INCOME, MASSACHUSETTS, 1970-1980 1/

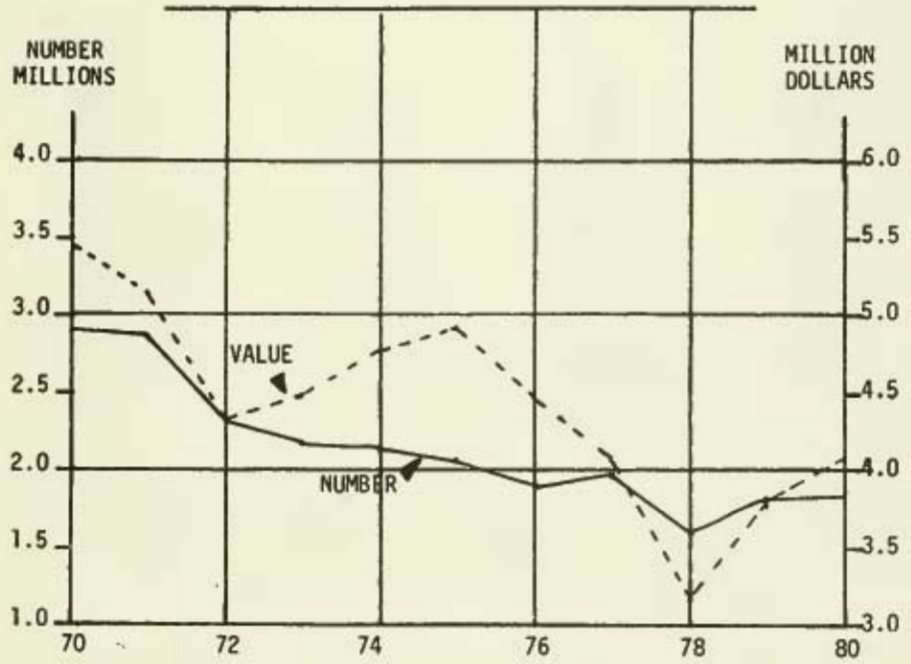
YEAR	NUMBER OF BIRDS			LIVEWEIGHT			PRICE PER LB.	CASH RECEIPTS	VALUE OF CHICKENS CONSUMED	GROSS INCOME
	PRODUCED 2/	CONSUMED 3/	SOLD	PRODUCED 2/	CONSUMED 3/	SOLD				
	1,000			1,000 POUNDS			CENTS	1,000 DOLLARS		
1970	1,352	18	1,520	8,102	85	8,816	9.6	846	8	854
1971	1,628	13	1,672	8,869	61	9,196	8.5	782	5	787
1972	1,902	12	1,628	10,089	55	8,791	9.5	835	5	840
1973	1,730	12	1,830	8,944	55	9,699	15.4	1,494	8	1,502
1974	1,870	12	1,697	10,831	55	10,012	10.3	1,031	6	1,037
1975	1,411	11	1,806	7,375	51	9,572	10.3	986	5	991
1976	1,676	11	1,746	8,639	51	9,063	13.3	1,277	7	1,284
1977	1,630	11	1,499	9,120	51	8,245	11.3	932	6	938
1978	1,510	11	1,909	8,484	51	10,500	12.3	1,292	6	1,298
1979	1,057	11	900	5,835	51	4,950	13.2	653	7	660
1980	793	11	718	4,332	51	3,949	8.3	328	4	332

1/ Does not include commercial broilers.
2/ Production is the number (or pounds) available for utilization during the year, i.e., sales plus home consumption, plus or minus change in inventory.
3/ Consumed in farm households on farms where produced.

MASSACHUSETTS CHICKENS:
CLASSES OF CHICKENS ON FARMS



MASSACHUSETTS CHICKEN INVENTORY:
NUMBER AND VALUE



EGGS, NUMBER OF HENS AND PULLETS OF LAYING AGE, RATE OF LAY AND PRODUCTION, MASSACHUSETTS, 1970-1980

YEAR	HENS & PULLETS ANNUAL AVERAGE	RATE OF LAY 1/	EGG PRODUCTION
	Thousands	Number	Millions
1970	2,370	220	521
1971	2,274	225	512
1972	2,010	232	466
1973	1,721	228	393
1974	1,610	234	376
1975	1,669	241	402
1976	1,430	240	343
1977	1,487	239	354
1978	1,413	241	341
1979	1,387	244	339
1980	1,345	242	326

1/ Annual rate of lay per layer on hand. (Eggs produced during year divided by average number of layers.)

EGGS: PRODUCTION, PRICE, CASH INCOME AND VALUE, MASSACHUSETTS, 1970-1980

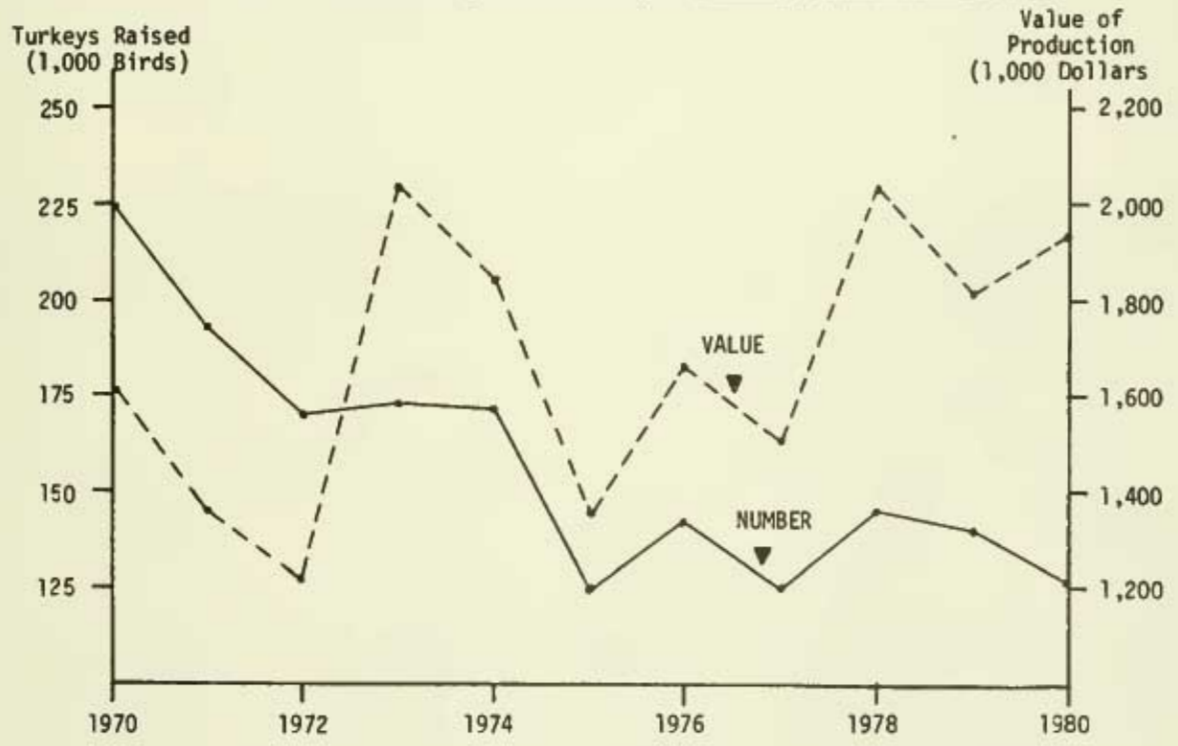
YEAR	EGGS PRODUCED	EGGS SOLD	PRICE PER DOZEN	CASH INCOME FROM SALES	GROSS INCOME
	Millions		Cents	1,000 Dollars	
1970	521	519	50.9	22,014	22,099
1971	512	511	44.5	18,949	18,986
1972	466	465	42.9	16,624	16,660
1973	393	392	62.9	20,548	20,600
1974	376	375	64.5	20,156	20,210
1975	402	401	66.2	22,122	22,177
1976	343	342	72.1	20,549	20,609
1977	355	354	69.9	20,621	20,679
1978	341	340	66.2	18,757	18,812
1979	339	338	73.8	20,787	20,849
1980	326	325	74.5	20,177	20,239

TURKEYS: PRODUCTION, PRICE AND VALUE, MASSACHUSETTS, 1971-1980

YEAR	TURKEYS RAISED		POUNDS PRODUCED 1/	PRICE PER POUND 2/	VALUE OF PRODUCTION
	HEAVY	LIGHT			
	1,000		1,000 Pounds	Cents	1,000 Dollars
1971	173	19	3,840	35.5	1,363
1972	141	29	3,383	36.0	1,218
1973	144	29	3,287	62.0	2,038
1974	139	33	3,268	57.0	1,863
1975	106	19	2,375	58.0	1,378
1976	122	21	2,860	58.0	1,659
1977	110	15	2,600	58.0	1,508
1978	128	18	2,993	68.0	2,035
1979	133	7	2,800	65.0	1,820
1980	126	-	2,470	78.0	1,927

1/ Includes home consumption.
2/ Liveweight equivalent price.

TURKEYS: NUMBER RAISED AND VALUE OF PRODUCTION, MASSACHUSETTS



CROP HIGHLIGHTS

The value of production in 1980 from corn silage, hay, potatoes and tobacco produced in Massachusetts totaled $59.4 million. Corn silage at 19.4 million was the largest componet of the total with hay at $19.1 million a close second.

CORN SILAGE

Bay State farmers produced a record high silage crop in 1980 of 680,000 tons, 3 percent greater than the record crop set the previous year. Corn silage was cut from 40,000 acres in 1980, with a yield of 17 tons per acre. Both the acreage cut and yield equaled record high levels set in 1978 and 1979 respectively.

HAY

The production of hay totaled 258,000 tons in 1980. This was 9 percent below the 1979 total but 7 percent above the 1970 level. Alfalfa and alfalfa mixtures accounted for 25 percent of the total production in 1980. Alfalfa production of 65,000 tons in 1980 was cut from 27,000 acres at a rate of 2.4 tons per acre. All other hay was cut from 92,000 acres at a rate of 2.1 tons per acre.

POTATOES

Potato production during 1980 totaled 748,000 hundredweight equaling the 1979 production. Both the acreage and yield were unchanged from the previous year. Growers received an average price of $7.50 per hundredweight, almost $2.00 more than the 1979 average and the highest value during the past decade. The value of production was $5.6 million, 34 percent higher than the previous year.

TOBACCO

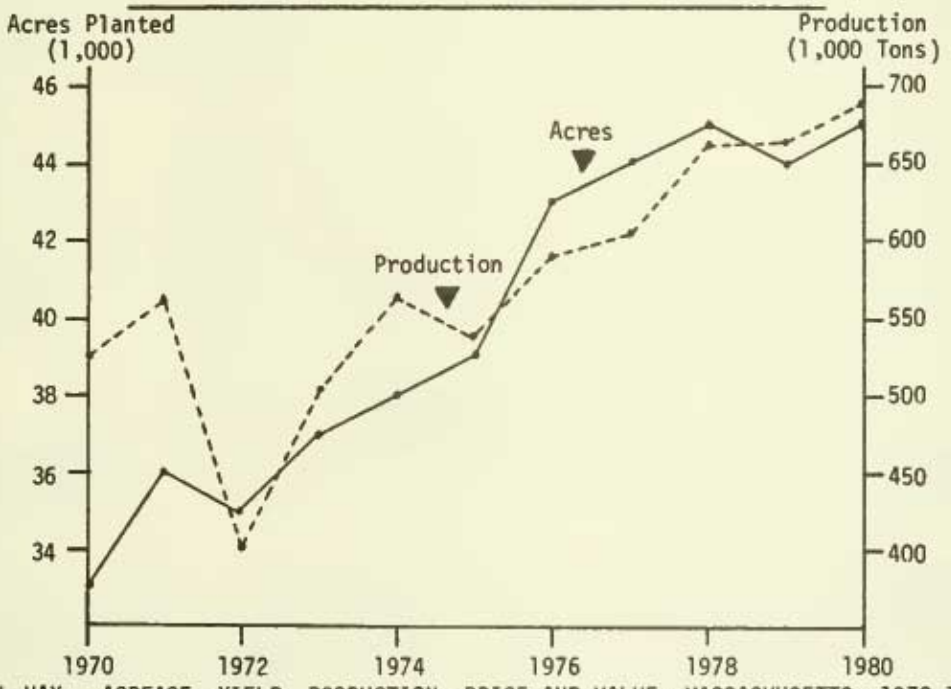
Shade tobacco production in the Commonwealth during 1980 totaled 1.4 million pounds, 309,000 pounds more than during the previous year. Area harvested in 1980 totaled 940,000 acres, 170 acres more than in 1979, and halting the downward trend that began in 1974. Yield per acre in 1980 was 1,475 pounds compared with 1,400 pounds in 1979. Growers received an average of $9.80 per pound in 1980, compared with $8.50 in 1979.

Havana Seed production totaled 480,000 pounds in 1980. This was 18 percent above the 1979 level and the highest production since 1972. The value of the crop totaled $629,000, as the growers received an average of $1.31 per pound.

CORN: ACREAGE, YIELD AND PRODUCTION, MASSACHUSETTS, 1970-1980

YEAR	ACREAGE PLANTED FOR ALL PURPOSES	HARVESTED FOR SILAGE		
		ACRES	PER ACRE	PRODUCTION
	1,000	1,000	Tons	1,000 Tons
1970	33	32	16.5	528
1971	36	34	16.5	561
1972	35	33	12.0	396
1973	37	35	14.5	508
1974	38	35	16.0	560
1975	39	36	15.0	540
1976	43	38	15.5	589
1977	44	38	16.0	608
1978	45	40	16.5	660
1979	44	39	17.0	663
1980	45	40	17.0	680

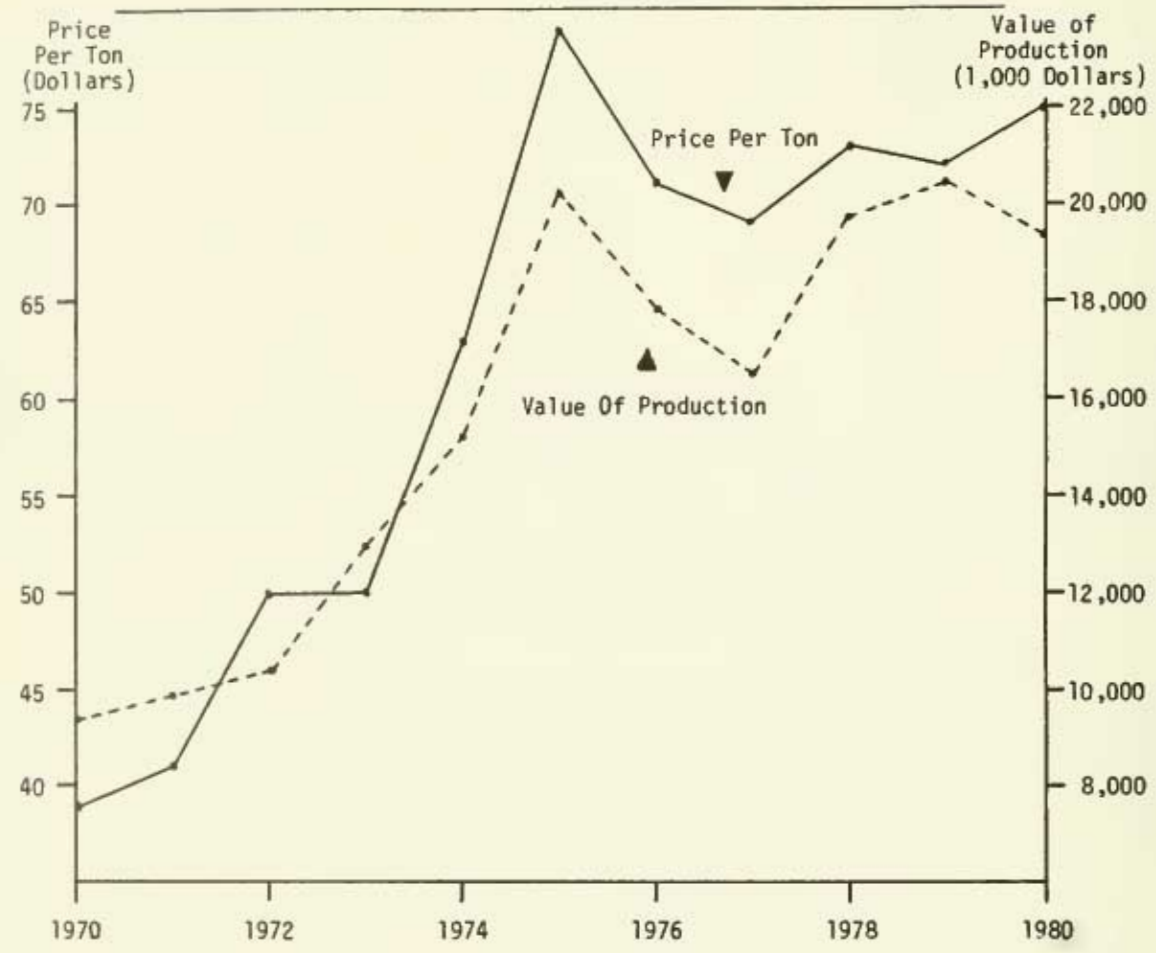
MASSACHUSETTS CORN
Acres Harvested For Silage and Production



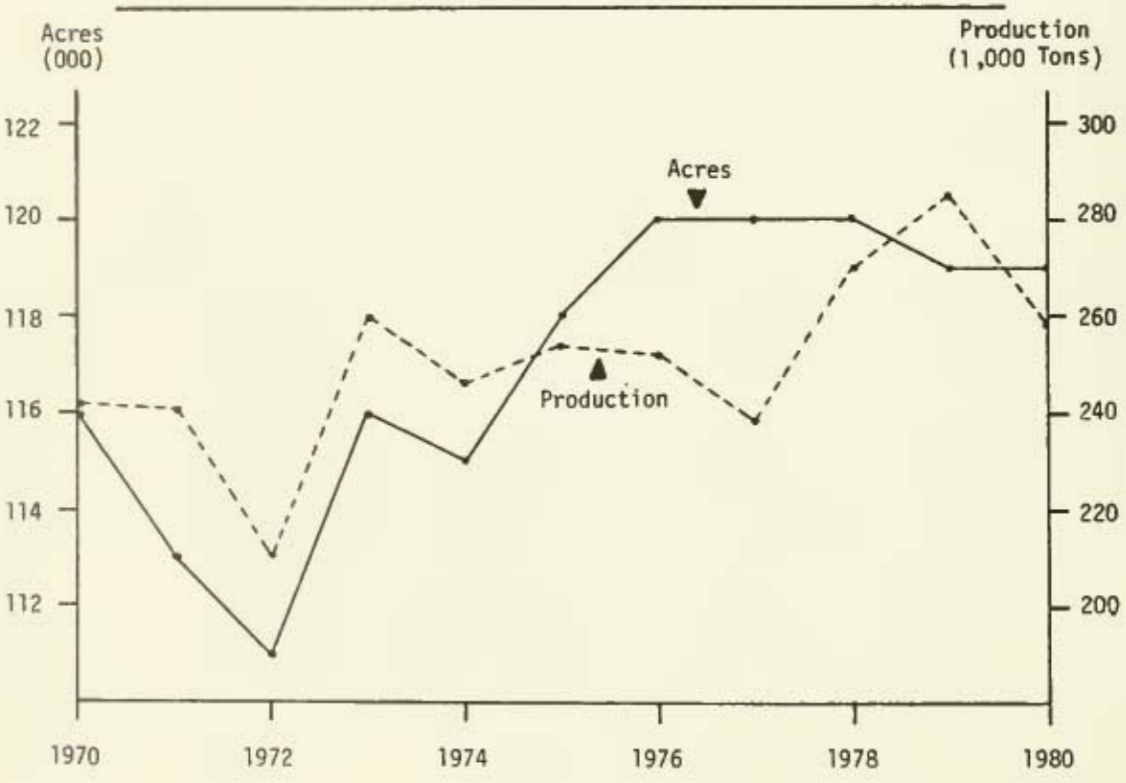
ALL HAY: ACREAGE, YIELD, PRODUCTION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

CROP YEAR	ACRES HARVESTED	YIELD PER ACRE	PRODUCTION	PRICE PER TON	VALUE OF PRODUCTION
	1,000	Tons	1,000 Tons	Dollars	1,000 Dollars
1970	116	2.09	242	39.00	9,438
1971	113	2.13	241	41.00	9,881
1972	111	1.87	208	50.00	10,400
1973	116	2.24	260	50.00	13,000
1974	115	2.12	244	63.00	15,327
1975	118	2.18	257	79.00	20,303
1976	120	2.10	252	71.00	17,892
1977	120	1.99	239	69.00	16,491
1978	120	2.26	271	73.00	19,783
1979	119	2.39	285	72.00	20,520
1980	119	2.17	258	75.00	19,350

MASSACHUSETTS, ALL HAY
Price Per Ton and Value of Production



MASSACHUSETTS, ALL HAY
Acreage and Production



ALFALFA HAY: ACREAGE, YEILD AND PRODUCTION, MASSACHUSETTS, 1970-1980

CROP YEAR	ACRES HARVESTED	YIELD PER ACRE	PRODUCTION
	1,000	Tons	1,000 Tons
1970	29	2.65	77
1971	28	2.55	71
1972	26	2.25	59
1973	26	2.55	66
1974	25	2.55	64
1975	26	2.60	68
1976	26	2.45	64
1977	28	2.30	64
1978	28	2.60	73
1979	27	2.90	78
1980	27	2.40	65

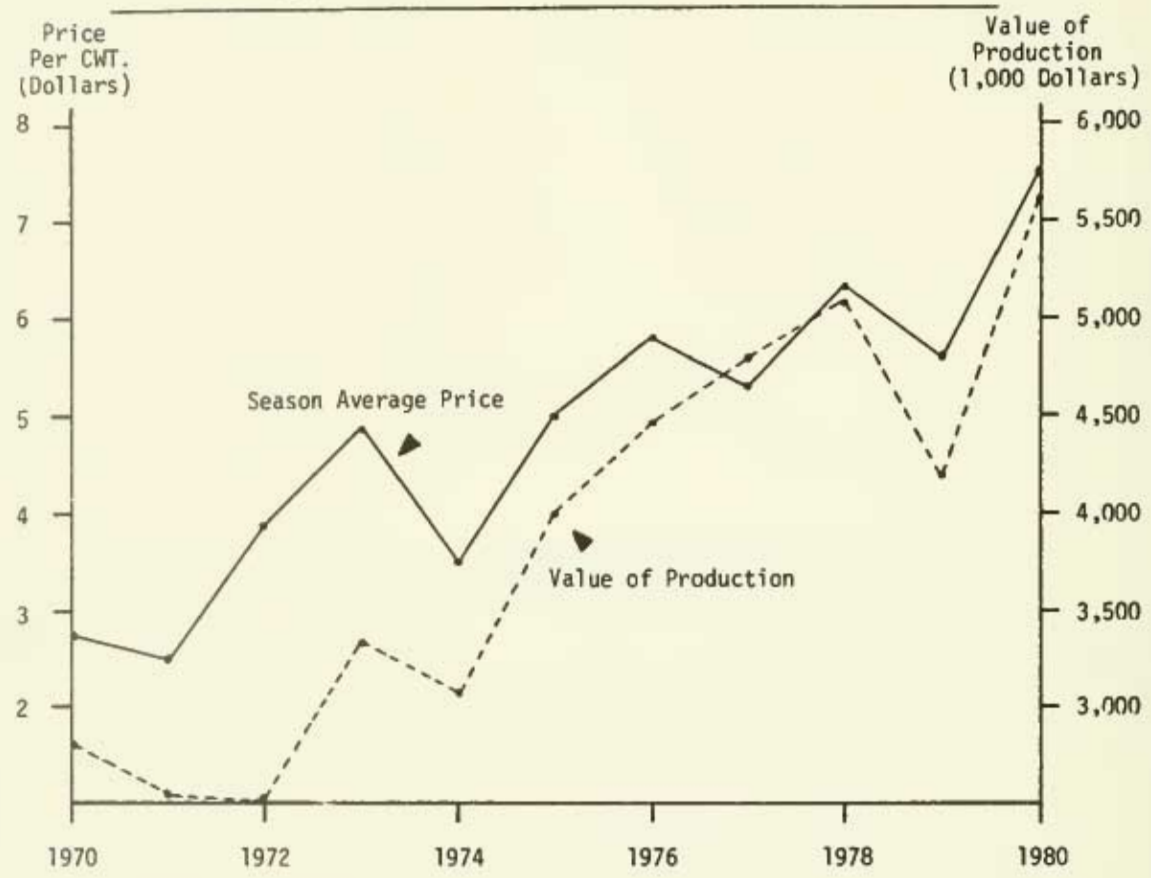
ALL OTHER HAY: ACREAGE, YIELD AND PRODUCTION, MASSACHUSETTS, 1970-1980

CROP YEAR	ACRES HARVESTED	YIELD PER ACRE	PRODUCTION
	1,000	Tons	1,000 Tons
1970	87	1.90	165
1971	85	2.00	170
1972	85	1.75	149
1973	90	2.15	194
1974	90	2.00	180
1975	92	2.05	189
1976	94	2.00	188
1977	92	1.90	175
1978	92	2.15	198
1979	92	2.25	207
1980	92	2.10	193

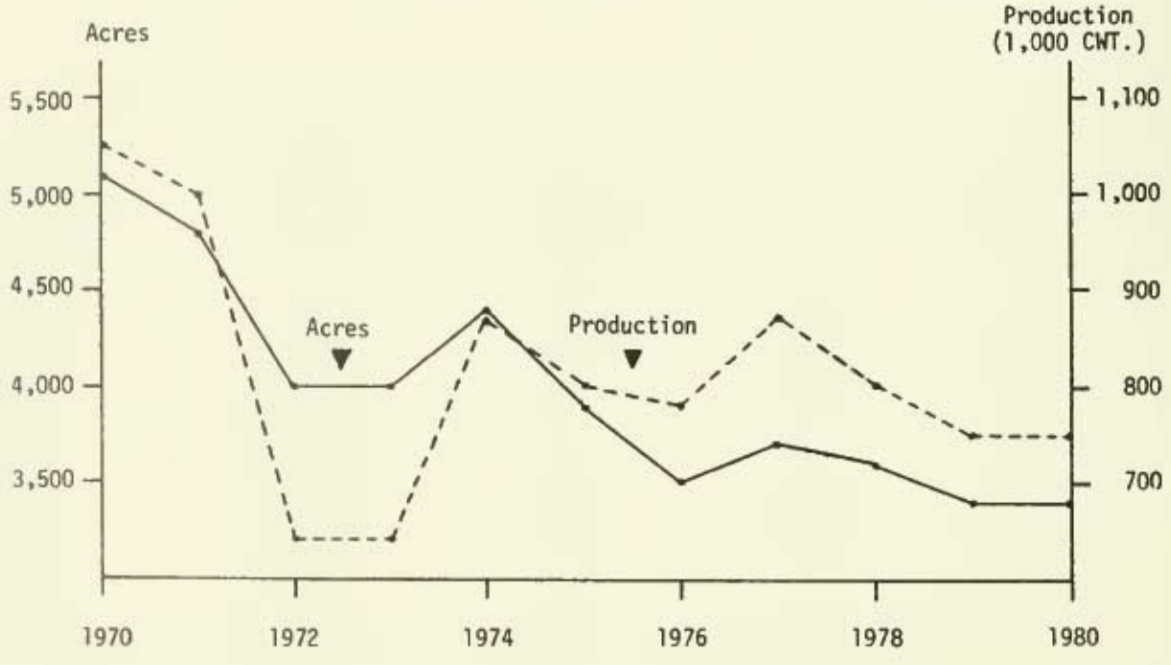
POTATOES: ACREAGE, YIELD, PRODUCTION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

CROP YEAR	ACREAGE HARVESTED	YIELD PER ACRE	TOTAL PRODUCTION	SEASON AVERAGE PRICE PER CWT.	VALUE OF PRODUCTION
	Acres	Cwt.	1,000 Cwt.	Dollars	1,000 Dollars
1970	5,100	205	1,046	2.69	2,814
1971	4,800	210	1,008	2.50	2,520
1972	4,000	160	640	3.90	2,496
1973	4,000	160	640	4.90	3,336
1974	4,400	200	880	3.50	3,080
1975	3,900	205	800	5.00	4,000
1976	3,500	220	770	5.80	4,466
1977	3,700	240	888	5.40	4,795
1978	3,600	225	810	6.30	5,103
1979	3,400	220	748	5.60	4,189
1980	3,400	220	748	7.50	5,610

MASSACHUSETTS POTATOES
Season Average Price and Value of Production



MASSACHUSETTS POTATOES
Harvested Acres and Production



TOBACCO, SHADE TYPE: ACREAGE, YIELD, PRODUCTION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

YEAR	ACREAGE HARVESTED	YIELD PER ACRE	TOTAL PRODUCTION	PRICE PER POUND	VALUE OF PRODUCTION
	Acres	Pounds	1,000 Pounds	Dollars	1,000 Dollars
1970	1,850	1,535	2,840	4.00	11,360
1971	1,300	1,725	2,243	4.00	8,972
1972	1,150	1,250	1,438	4.85	6,974
1973	1,300	1,210	1,573	5.15	8,101
1974	1,300	1,610	2,093	6.00	12,558
1975	1,250	1,335	1,669	6.40	10,682
1976	1,050	1,480	1,554	5.40	8,392
1977	980	1,600	1,568	6.00	9,408
1978	860	1,300	1,118	7.50	8,385
1979	770	1,400	1,078	8.50	9,163
1980	940	1,475	1,387	9.80	13,593

TOBACCO, HAVANA SEED: ACREAGE, YIELD, PRODUCTION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

YEAR	ACREAGE HARVESTED	YIELD PER ACRE	TOTAL PRODUCTION	PRICE PER POUND	VALUE OF PRODUCTION
	Acres	Pounds	1,000 Pounds	Dollars	1,000 Dollars
1970	370	1,950	722	0.61	440
1971	310	2,050	636	0.61	388
1972	260	1,850	481	0.62	298
1973	210	1,850	389	0.72	280
1974	160	2,040	326	0.82	267
1975	170	1,650	281	0.98	275
1976	160	1,819	291	0.87	253
1977	180	1,880	338	0.98	331
1978	170	2,000	340	1.10	374
1979	220	1,850	407	1.20	488
1980	240	2,000	480	1.31	629

FRUIT AND VEGETABLE HIGHLIGHTS

CRANBERRIES

A new record production was set in the Bay State in 1980 with 1,185,000 barrels produced in 1980. This was 5,000 barrels greater than the previous record set in 1978 and almost 10 percent greater than the 1979 crop. Producers received an average of $33.20 per barrel which places the value of production at $39 million, 37 percent above the 1979 crop.

APPLES

Apple production from commercial orchards in the Commonwealth totaled 2.4 million 42 pound units, up 5 percent from 1979. Value of production reached only $14.6 million, 2 percent below the 1979 crop as the average price of $6.13 per unit was 38 cents below the 1979 average. The fruit quality was good although hail damage occurred in some orchards. Dry weather caused an early drop and limited fruit sizing in some areas.

PEACHES

There were 42,000, 48 pound units of peaches produced in 1980, 11 percent more than the 1979 total. Although the average price received was almost a dollar less at $14.29 per unit, the value of production was still 4 percent higher than 1979 and the highest for the past 10 years.

SWEET CORN

The Commonwealth's sweet corn production in 1980, at 634,000 hundredweight rose 9 percent above the 1979 crop. Acreage harvested increased 4 percent and yield per acre was 5 percent above last year. Growers received an average of $9.09 per hundredweight in 1980, a 10¢ per unit increase over the 1979 average.

TOMATOES

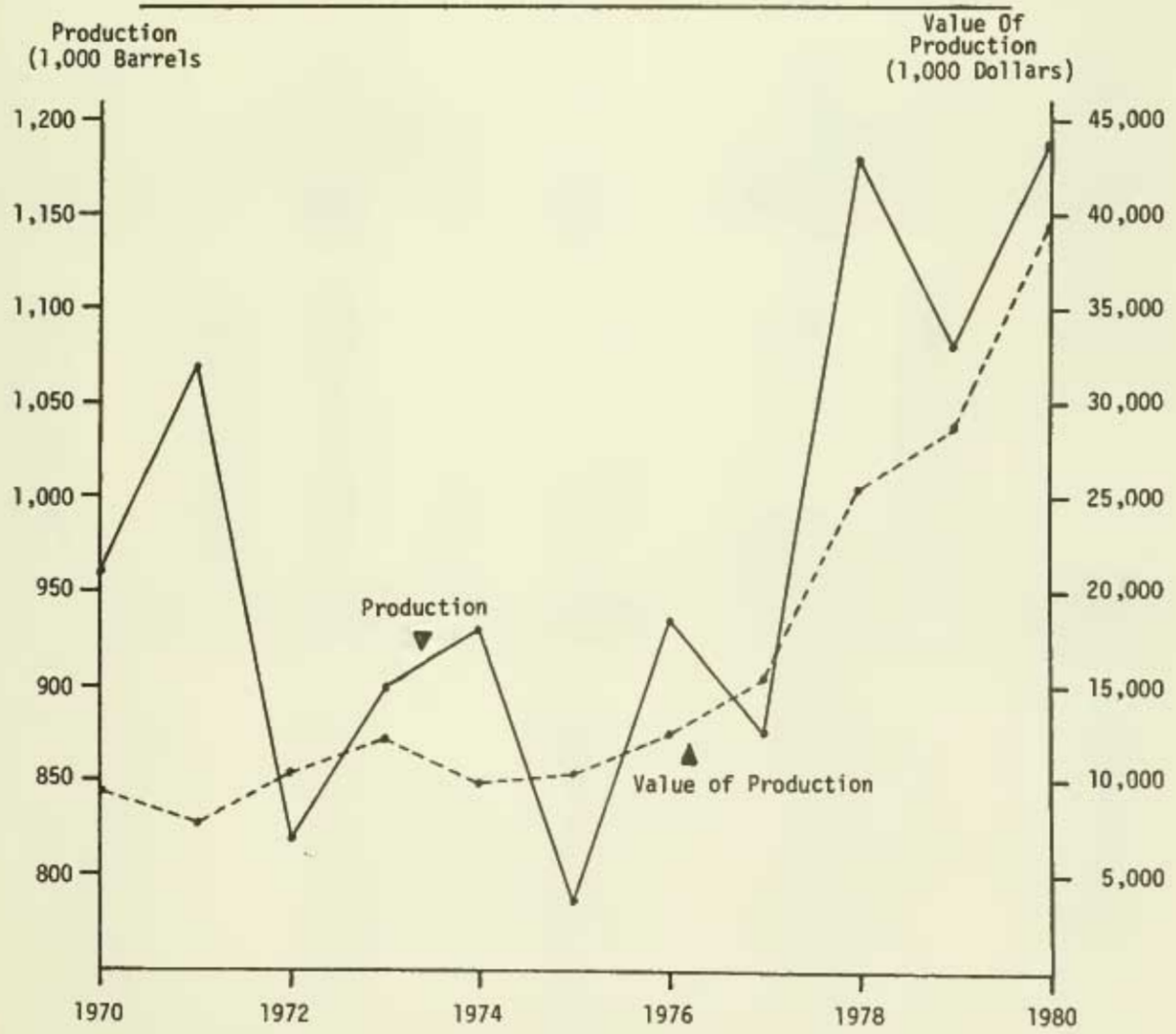
The 1980 tomato crop totaled 168,000 hundredweight, 42 percent above 1979 and the highest production in the past decade. Both increased acreage and high yields attributed to the large production. The value of the crop at $3.6 million, was 26 percent above last year but the average per hundredweight of $21.70 was $2.90 below the 1979 average.

CRANBERRIES: ACREAGE, YIELD, PRODUCTION, UTILIZATION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

YEAR	ACRES	YIELD PER ACRE	PRODUCTION 1/	UTILIZATION			SEASON AVERAGE PRICE PER BARREL 3/	VALUE OF UTILIZED PRODUCTION 4/
				FRESH SALES	PROCESSED	SHRINKAGE 2/		
		Barrels		1,000 Barrels			Dollars	1,000 Dols.
1970	11,200	85.4	957	210	607	47	10.70	9,245
1971	11,200	95.7	1,072	239	441	57	10.70	7,886
1972	11,200	73.1	819	170	600	49	12.60	10,319
1973	11,200	80.4	901	246	563	92	13.60	12,254
1974	11,200	83.2	932	167	491	274	10.70	9,972
1975	11,200	70.1	785	162	508	115	13.00	10,205
1976	11,200	83.5	935	220	630	85	13.40	12,529
1977	11,200	78.1	875	207	576	92	17.70	15,488
1978	11,200	105.4	1,180	247	833	100	21.60	25,488
1979	11,200	96.4	1,080	130	880	70	26.60	28,728
1980	11,200	105.8	1,185	110	1,016	59	33.20	39,342

1/ Includes cranberries that were put in set aside under the Cranberry Marketing Order.
2/ Berries paid for by processors and lost because of dehydration and berry breakdown after delivery.
3/ Equivalent return at first delivery point, screen basis.
4/ Excludes cranberries that were put in set aside under the Cranberry Marketing Order.

MASSACHUSETTS CRANBERRIES
Production and Value of Production



APPLES: PRODUCTION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

YEAR	PRODUCTION 1/			PRICE PER UNIT	VALUE OF UTILIZED PRODUCTION
	TOTAL	NOT UTILIZED 2/	HAVING VALUE		
	1,000 - 42 Pound Units			Dollars	1,000 Dollars
1970	2,619	52	2,567	2.65	6,802
1971	2,738	238	2,500	2.75	6,878
1972	2,167	---	2,167	3.90	8,454
1973	1,976	---	1,976	5.59	11,039
1974	2,548	167	2,381	4.33	10,300
1975	2,500	167	2,333	4.37	10,192
1976	2,262	---	2,262	6.13	13,870
1977	2,262	72	2,190	5.38	11,776
1978	2,500	---	2,500	5.80	14,490
1979	2,262	---	2,262	6.51	14,870
1980	2,381	---	2,381	6.13	14,600

1/ Estimates relate to production in orchards of 100 or more trees.
2/ Abandoned because of economic reasons

COMMERCIAL APPLE PRODUCTION BY VARIETY, MASSACHUSETTS, 1970-1980

YEAR	CORTLAND	DELICIOUS	GOLDEN DELICIOUS	MCINTOSH	NORTHERN SPY	ROME BEAUTY	OTHER	TOTAL PRODUCTION
	1,000 - 42 Pound Units							
1970	193	271	33	1,638	43	43	398	2,619
1971	250	326	38	1,748	26	57	293	2,738
1972	124	248	36	1,481	14	17	248	2,167
1973	188	264	33	1,236	17	40	198	1,976
1974	143	260	40	1,764	21	45	274	2,548
1975	205	293	31	1,614	17	43	298	2,500
1976	210	288	55	1,360	21	45	283	2,262
1977	195	252	36	1,462	17	38	262	2,262
1978	171	331	38	1,538	21	31	369	2,500
1979	181	329	40	1,405	14	31	262	2,262
1980	190	324	36	1,500	19	36	276	2,381

PEACHES: PRODUCTION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

YEAR	PRODUCTION	PRICE PER UNIT	VALUE OF PRODUCTION
	1,000, 48 Pound Units	Dollars	1,000 Dollars
1970	73	5.27	385
1971	79	5.05	399
1972	35	8.26	289
1973	58	9.66	560
1974	35	8.74	306
1975	42	9.52	400
1976	35	12.63	442
1977	42	10.48	440
1978	38	13.74	522
1979	38	15.15	576
1980	42	14.29	600

SWEET CORN: ACREAGE, YIELD, PRODUCTION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

CROP YEAR	ACRES HARVESTED	YIELD PER ACRE	TOTAL PRODUCTION	AVERAGE PRICE PER CWT.	VALUE OF PRODUCTION
		Cwt.	1,000 Cwt.	Dollars	1,000 Dollars
1970	7,800	75	585	6.01	3,516
1971	8,200	78	640	6.22	3,981
1972	7,100	75	533	6.93	3,694
1973	8,000	78	624	6.20	3,869
1974	8,200	62	508	8.90	4,521
1975	8,200	81	664	7.10	4,714
1976	7,400	72	533	7.71	4,109
1977	7,200	60	432	8.90	3,845
1978	6,500	88	572	7.00	4,004
1979	6,900	84	580	8.99	5,214
1980	7,200	88	634	9.09	5,763

TOMATOES: ACREAGE, YIELD, PRODUCTION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

CROP YEAR	ACRES HARVESTED	YIELD PER ACRE	TOTAL PRODUCTION	AVERAGE PRICE PER CWT.	VALUE OF PRODUCTION
		Cwt.	1,000 Cwt.	Dollars	1,000 Dollars
1970	750	190	143	12.50	1,788
1971	750	200	150	12.50	1,875
1972	700	190	133	17.70	2,354
1973	730	195	142	17.40	2,471
1974	700	175	123	16.50	2,030
1975	630	210	132	18.00	2,376
1976	620	195	121	21.40	2,589
1977	660	190	125	20.40	2,550
1978	670	210	141	21.80	3,074
1979	620	190	118	24.60	2,903
1980	800	210	168	21.70	3,646

MAPLE SYRUP

The 1980 Maple syrup production in Massachusetts totaled 18,000 gallons, compared with 30,000 gallons in 1979. The lack of good sap runs was attributed to the limited snow cover that allowed the ground to freeze to a deep level. The weather during the season was also characterized as too warm. The season opened about March 6, and closed about April 6, about the same as the 1979 season. The color of the syrup was primarily medium similar to the 1979 crop.

The price of maple syrup continues to increase, reaching $18.40 per gallon, 16 percent above the 1979 price. Although the price was much higher than 1979, with the reduced production, the value of $331,000 was well below the record high value set in 1979.

MAPLE SYRUP: PRODUCTION, DISPOSITION, PRICE AND VALUE, MASSACHUSETTS, 1970-1980

YEAR	PRODUCTION	SOLD	SEASON AVERAGE PRICE PER GALLON	VALUE OF PRODUCTION
	1,000 Gallons	1,000 Gallons	Dollars	1,000 Dollars
1970	32	31	6.70	214
1971	25	24	7.80	195
1972	28	27	8.70	244
1973	20	19	9.40	188
1974	25	24	11.20	280
1975	31	30	10.70	332
1976	27	25	12.75	319
1977	27	25	13.00	351
1978	28	26	14.10	367
1979	30	28	15.90	477
1980	18	17	18.40	331

MAPLE SYRUP PRICES: BY TYPE OF SALE AND SIZE OF CONTAINER, MASSACHUSETTS, 1971-1980

YEAR	RETAIL					WHOLESALE					ALL SALES EQUIVALENT PER GALLON
	GAL	½ GAL	QUART	PINT	½ PINT	GAL	½ GAL	QUART	PINT	½ PINT	
	Dollars										
1971	7.40	4.00	2.40	1.50	1.05	6.60	3.65	2.30	1.35	.85	7.80
1972	8.10	4.55	2.75	1.90	1.15	7.30	4.30	2.60	1.55	1.00	8.70
1973	9.00	5.00	3.10	2.25	1.25	8.30	4.60	2.85	1.80	1.10	9.40
1974	10.50	5.90	3.55	2.30	1.40	9.00	5.00	3.00	1.85	1.20	11.20
1975	11.10	6.20	3.75	2.50	1.50	10.00	5.45	3.30	2.05	1.15	10.70
1976	11.65	6.45	3.90	2.55	1.50	10.35	5.75	3.35	2.20	1.35	12.75
1977	12.30	6.90	4.05	2.65	1.80	11.20	6.05	3.70	2.40	1.50	14.20
1978	13.10	7.40	4.29	2.81	1.86	11.66	6.59	3.79	2.41	1.49	14.10
1979	14.88	8.37	4.84	3.12	2.13	12.53	7.13	4.09	2.66	1.77	15.90
1980	17.66	9.69	5.88	3.69	2.46	16.25	8.94	4.73	3.07	1.98	18.40

FOLIAGE PLANTS FOR INDOOR OR PATIO USE: NUMBER OF PRODUCERS, SQUARE FEET IN PRODUCTION, NEW VALUE OF SALES, MASSACHUSETTS, 1973-1980

YEAR	NUMBER OF PRODUCERS	SQUARE FEET IN PRODUCTION	AVERAGE VALUE PER SQUARE FOOT	PERCENTAGE OF SALES AT WHOLESALE	NET VALUE OF SALES 1/
		1,000 Square Feet			1,000 Dollars
1973	35	175	3.34	89	584
1974	76	581	5.24	76	3,203
1975	135	1,040	4.49	55	4,670
1976	131	965	4.92	62	4,743
1977	112	926	6.00	30	5,555
1978	127	927	5.36	56	4,970
1979	104	715	6.31	75	4,513
1980	84	981	6.68	42	6,555

1/ Gross value of sales less cost of plant material purchased from other growers for growing on.

REPORTED TOTAL AVERAGE AREA USED FOR PRODUCTION AND DERIVED AVERAGE VALUE PER UNIT: CARNATIONS, CHRYSANTHEMUMS, POTTED LILLIES AND POTTED POINSETTIAS, MASSACHUSETTS, 1975-1980 1/

YEAR	CARNATIONS		CHRYSANTHEMUMS			POTTED LILLIES	POTTED POINSETTIAS
	STANDARD	MINIATURE	STANDARD	POMPON	POTTED		
			1,000 Square Foot Production Area				
1975	333	178	425	400	723		
1976	342	209	341	417	576	336	952
1977	238	123	296	445	309	367	813
1978	149	132	257	366	427	295	1,009
1979	88	98	225	292	501	294	1,044
1980	50	56	157	283	544	193	980
			Average Value Per Square Foot - Dollars				
1975	2.05	2.31	1.71	1.44	2.09		
1976	2.31	1.81	2.31	1.46	2.46	2.69	1.86
1977	2.43	2.07	2.43	1.32	2.79	2.19	1.86
1978	1.50	2.58	2.56	1.77	2.45	2.62	2.04
1979	2.74	2.83	2.90	2.05	2.98	3.44	2.04
1980	3.00	2.98	2.58	2.21	3.54	3.80	2.38

1/ Value figures for all plants are equivalent wholesale value of all sales.

CUT FLOWERS: NUMBER OF PRODUCERS, PRODUCTION, SALES, PRICE & VALUE, MASSACHUSETTS, 1973-1980

TYPE AND CROP YEAR	PRODUCERS 2/	SALES	PERCENTAGE OF SALES AT WHOLESALE	WHOLESALE PRICE	VALUE OF SALES AT 1/ WHOLESALE
	Number	1,000 Blooms	Percent	Cents	1,000 Dollars
STANDARD CARNATIONS					
1973	58	11,140	93	11.1	1,237
1974	45	9,403	75	11.1	1,044
1975	34	5,549	65	12.3	683
1976	27	5,853	93	10.3	603
1977	24	3,851	89	11.2	431
1978	19	1,603	92	14.0	224
1979	14	1,238	84	20.0	241
1980	9	752	96	20.0	150
MINIATURE CARNATIONS		1,000 Bunches			
1973	26	271	83	125	339
1974	27	278	50	120	334
1975	23	273	65	151	412
1976	24	256	83	148	379
1977	20	222	89	115	255
1978	15	252	99	135	340
1979	15	175	96	158	277
1980	7	105	98	159	167
HYBRID TEA ROSES		1,000 Blooms			
1973	11	14,161	99	18.9	3,243
1974	9	19,708	97	21.0	4,139
1975	9	13,483	69	23.9	3,222
1976	10	12,636	100	19.7	2,489
1977	13	10,575	100	26.2	2,771
1978	9	12,514	99	26.0	3,254
1979	11	13,651	99	24.4	3,331
1980	12	10,565	98	25.8	2,726
MINIATURE OR SWEETHEART ROSES		1,000 Blooms			
1973	8	9,635	100	11.4	1,098
1974	9	8,930	97	14.7	1,313
1975	9	9,114	72	11.7	1,066
1976	9	6,174	100	12.5	772
1977	9	6,537	100	16.3	1,066
1978	9	5,401	99	17.0	918
1979	8	7,020	99	17.3	1,214
1980	9	8,889	99	18.5	1,644
STANDARD CHRYSANTHEMUMS		1,000 Bunches			
1973	88	2,983	81	29.9	892
1974	52	2,412	92	21.0	748
1975	54	2,341	92	31.1	728
1976	70	1,774	85	44.5	789
1977	58	1,721	92	41.7	718
1978	57	1,545	90	42.5	657
1979	53	1,355	83	48.1	652
1980	47	841	76	48.1	405

CUT FLOWERS: NUMBER OF PRODUCERS, PRODUCTION, SALES, PRICE & VALUE, MASSACHUSETTS, 1973-1980, CONT.

TYPE AND CROP YEAR	PRODUCERS 2/	SALES	PERCENTAGE OF SALES AT WHOLESALE	WHOLESALE PRICE	VALUE OF SALES AT 1/ WHOLESALE
	Number	1,000 Bunches	Percent	Cents	1,000 Dollars
POMPON CHRYSANTHEMUMS					
1973	115	558	55	128	714
1974	70	371	68	131	486
1975	102	377	67	153	577
1976	87	367	71	166	609
1977	89	356	54	165	587
1978	75	360	77	180	648
1979	60	338	58	177	598
1980	63	335	64	187	626
POTTED CHRYSANTHEMUMS		1,000 Pots			
1973	59	414	83	184	762
1974	60	503	68	193	971
1975	111	747	79	202	1,509
1976	115	609	78	233	1,419
1977	85	421	78	205	863
1978	87	402	63	260	1,045
1979	93	562	70	266	1,495
1980	73	762	45	253	1,928
SNAPDRAGONS		1,000 Stems			
1976	52	2,651	88	16.8	445
1977	50	1,792	89	19.7	353
1978	57	1,674	90	20.0	335
1979	40	1,416	88	20.3	287
1980	36	982	87	28.0	275
POTTED GERANIUMS		1,000 Pots			
1976	242	5,755	82	88	5,064
1977	225	3,183	52	75	2,387
1978	230	3,125	66	85	2,656
1979	220	3,631	61	91	3,304
1980	190	3,111	57	94	2,924
POTTED LILLIES		1,000 Pots		Dollars	
1976	111	364	87	2.48	903
1977	108	322	80	2.50	805
1978	101	258	73	3.00	774
1979	93	329	78	3.07	1,010
1980	78	245	68	2.99	733
POTTED POINSETTIAS		1,000 Pots			
1976	146	634	79	2.79	1,769
1977	139	741	68	2.05	1,519
1978	136	750	67	2.75	2,063
1979	120	751	75	2.83	2,125
1980	112	760	57	3.07	2,333

1/ Equivalent wholesale value of all sales.
2/ Beginning with 1974, number of producers is number who produce and sell $10,000 or more of fresh (cut) flowers, flowering and foliage plants, bedding plants and cultivated florist greens. Previously, the definition included growers who sold $2,000 or more of the above mentioned items.

FERTILIZER CONSUMPTION: BY KINDS AND OF PRIMARY NUTRIENTS, MASSACHUSETTS, 1970-1980

YEAR ENDED JUNE 30	KIND OF FERTILIZER				PRIMARY NUTRIENTS		
	MIXED FERTILIZER	PRIMARY NUTRIENTS MATERIALS	SECONDARY & MICRO-NUTRIENTS	TOTAL FERTILIZER	N	AVAILABLE P_2O_5	K_2O
	Tons				Tons		
1970	52,953	16,580	63	69,596	8,159	6,325	6,071
1971	47,774	23,298	51	71,123	7,727	6,842	5,514
1972	54,997	17,183	54	72,234	8,853	6,295	6,126
1973	59,643	17,045	50	76,738	10,095	7,726	6,899
1974	61,540	15,810	23	77,373	8,999	7,031	7,246
1975	51,814	15,216	36	67,066	7,866	5,588	6,049
1976	55,548	15,335	150	71,033	8,803	5,984	6,779
1977	53,094	14,882	28	68,004	9,015	5,872	6,607
1978	71,471	14,970	62	86,503	11,501	7,644	8,552
1979	58,397	11,393	224	70,014	10,275	6,220	7,530
1980	50,417	15,207	117	65,741	9,092	5,462	6,380

FARMS: NUMBER AND ACREAGE, MASSACHUSETTS, 1970-1980

YEAR	NUMBER	AVERAGE SIZE	LAND IN FARMS
		Acres	Acres
1970	6,200	121	750,000
1971	5,900	122	720,000
1972	5,700	123	700,000
1973	5,500	124	680,000
1974	5,500	124	680,000
1975	5,800	121	700,000
1976	6,300	111	700,000
1977	6,200	111	690,000
1978	5,900	115	680,000
1979	6,200	110	680,000
1980	5,900	115	680,000

PRICES PAID BY FARMERS: INDEX NUMBERS, ANNUAL AVERAGE, UNITED STATES, 1965-1980, BY YEARS (1977=100)

YEAR	COMMODITIES & SER., INTEREST, TAXES & WAGE RATES	PRODUCTION ITEMS INTEREST, TAXES, & WAGE RATES	PRODUCTION ITEMS	INTEREST PAYABLE PER ACRE	TAXES PAYABLE PER ACRE	WAGE RATES FOR HIRED FARM LABOR 1/
1965	47	45	48	22	46	38
1966	49	47	50	25	49	41
1967	49	48	50	28	53	44
1968	51	49	50	31	58	48
1969	53	51	52	35	63	53
1970	55	54	54	38	68	57
1971	58	56	57	42	72	59
1972	62	60	61	46	75	63
1973	71	72	73	54	77	69
1974	81	81	83	65	81	79
1975	89	89	91	76	87	85
1976	95	95	97	87	94	93
1977	100	100	100	100	100	100
1978	108	109	108	118	100	107
1979	123	125	125	144	107	117
1980	139	140	138	179	114	127

1/ Simple average of quarterly indexes seasonally adjusted.

INDEX NUMBERS OF PRICES RECEIVED BY FARMERS, BY COMMODITY GROUPS, UNITED STATES ANNUAL AVERAGE, 1965-1980 (1977=100)

YEAR	CROPS								LIVESTOCK & PRODUCTS				ALL FARM PRODUCTS
	FOOD GRAINS	FEED GRAINS AND HAY	TOBACCO	COTTON	OIL BEARING CROPS	FRUIT	COMMERCIAL VEGETABLES	ALL CROPS	DAIRY PRODUCTS	POULTRY AND EGGS	MEAT ANIMALS	ALL LIVESTOCK	
1965	59	55	53	48	41	65	53	53	44	63	56	54	54
1966	67	57	57	42	45	67	57	55	50	69	62	60	58
1967	64	55	57	37	41	61	57	52	52	57	60	57	55
1968	58	50	58	38	40	82	61	52	54	61	61	60	56
1969	56	53	61	34	38	62	60	50	57	69	71	67	59
1970	59	57	62	36	41	59	59	52	59	64	72	67	60
1971	61	59	64	40	46	67	65	56	61	59	72	67	62
1972	70	57	70	48	51	72	65	60	63	60	88	77	69
1973	138	90	74	54	93	84	76	91	74	101	118	104	98
1974	192	134	85	85	96	86	81	117	86	94	98	94	105
1975	155	127	93	68	81	85	92	105	90	103	100	98	101
1976	129	120	93	99	85	80	91	102	100	102	101	101	102
1977	100	100	100	100	100	100	100	100	100	100	100	100	100
1978	122	101	109	91	93	148	105	106	109	106	134	124	115
1979	147	114	118	96	103	144	110	116	124	111	166	147	132
1980	165	132	125	118	102	127	113	125	135	112	156	144	134

FARM PRODUCTION EXPENSES, MASSACHUSETTS, 1969-1979

YEAR	CURRENT FARM OPERATING EXPENSES						
	FEED	LIVESTOCK	SEED 1/	FERTILIZER AND LIME	REPAIRS AND OPERATION OF CAPITAL ITEMS 2/	MISCELLANEOUS 3/	HIRED LABOR 4/
	Million Dollars						
1969	27.2	4.7	3.0	3.9	12.8	16.7	32.0
1970	28.9	4.0	3.1	3.6	13.0	17.3	32.0
1971	27.6	3.9	3.2	3.7	13.6	18.4	33.4
1972	25.8	4.2	3.4	3.9	13.2	20.0	33.2
1973	37.2	4.7	4.2	5.6	14.1	20.9	38.8
1974	47.3	3.2	5.5	8.5	17.1	24.4	37.1
1975	45.0	2.4	5.4	6.8	19.6	27.2	37.2
1976	44.8	2.7	6.3	6.2	24.3	27.4	40.4
1977	42.5	3.2	6.7	5.8	25.3	25.7	46.8
1978	37.9	3.3	7.2	8.0	27.6	30.3	48.0
1979	41.5	1.8	7.9	7.0	34.4	39.2	55.1

1/ Includes bulbs, plants and trees.

2/ Repairs and maintenance of buildings, repairs and operation of motor vehicles and other machinery, and petroleum fuel and oil used in the farm business.

3/ Includes binding, cotton ginning, Federal crop insurance, containers, diary supplies, electricity, greenhouse and nursery, grazing fees, harness and saddlery, net insurance premiums (fire, wind and crop hail), irrigation, livestock marketing service (excludes feed and transportation), milk hauling, miscellaneous hardware (includes blacksmithing), machine hire and custom work, miscellaneous livestock and poultry supplies, pesticides, small hand tools, short term interest, telephones (business share), veterinary services and medicines (plus insem.) and other miscellaneous.

4/ Includes cash wages, perquisites, and Social Security taxes paid by employers.

FARM PRODUCTION EXPENSES (Continued), MASSACHUSETTS, 1969-1979

YEAR	TOTAL CURRENT FARM OPERATING EXPENSES	DEPRECIATION 1/	TAXES ON FARM PROPERTY	INTEREST ON FARM MORTGAGE DEBT	NET RENT TO NON-FARM LANDLORDS 2/	TOTAL PRODUCTION EXPENSES
	Million Dollars					
1969	100.3	18.4	9.9	2.2	-1.0	129.8
1970	102.0	18.7	10.4	2.4	-1.1	132.4
1971	103.8	20.5	11.3	2.6	-1.3	137.0
1972	103.8	21.0	11.7	3.0	-1.3	138.2
1973	125.4	22.2	12.8	3.6	-1.5	162.6
1974	142.9	25.6	12.6	4.5	-1.5	184.1
1975	143.7	29.6	13.3	5.8	-1.2	191.2
1976	152.2	31.9	14.1	6.5	-1.0	203.7
1977	156.0	30.2	15.4	6.0	-.4	207.2
1978	162.3	33.6	16.4	5.8	-.4	217.7
1979	186.9	36.8	16.8	5.2	-.3	245.4

1/ Includes depreciation and accidental damage to farm buildings and depreciation of motor vehicles and other farm machinery and equipment.

2/ Minus sign reflects a net income position rather than a net expense position.

CASH RECEIPTS FROM FARM MARKETING AND GOVERNMENT PAYMENTS, MASSACHUSETTS, 1950-1979

Year	CASH INCOME FROM FARM MARKETING			Government Payments	Total Marketings & Government Payments
	Crops	Livestock & Livestock Products	Total Crops and Livestock		
	(000) Dollars				
1950	54,652	126,957	181,609	559	182,168
1955	52,897	119,563	172,460	438	172,898
1960	60,121	104,608	164,729	672	165,401
1965	69,124	91,117	160,241	645	160,886
1970	71,590	85,340	156,930	619	157,549
1975	100,904	100,594	201,498	593	202,091
1976	110,269	109,106	219,375	599	219,974
1977	118,699	105,056	223,755	575	224,330
1978	111,990	134,613	246,603	773	247,376
1979	137,838	117,881	255,719	592	256,311

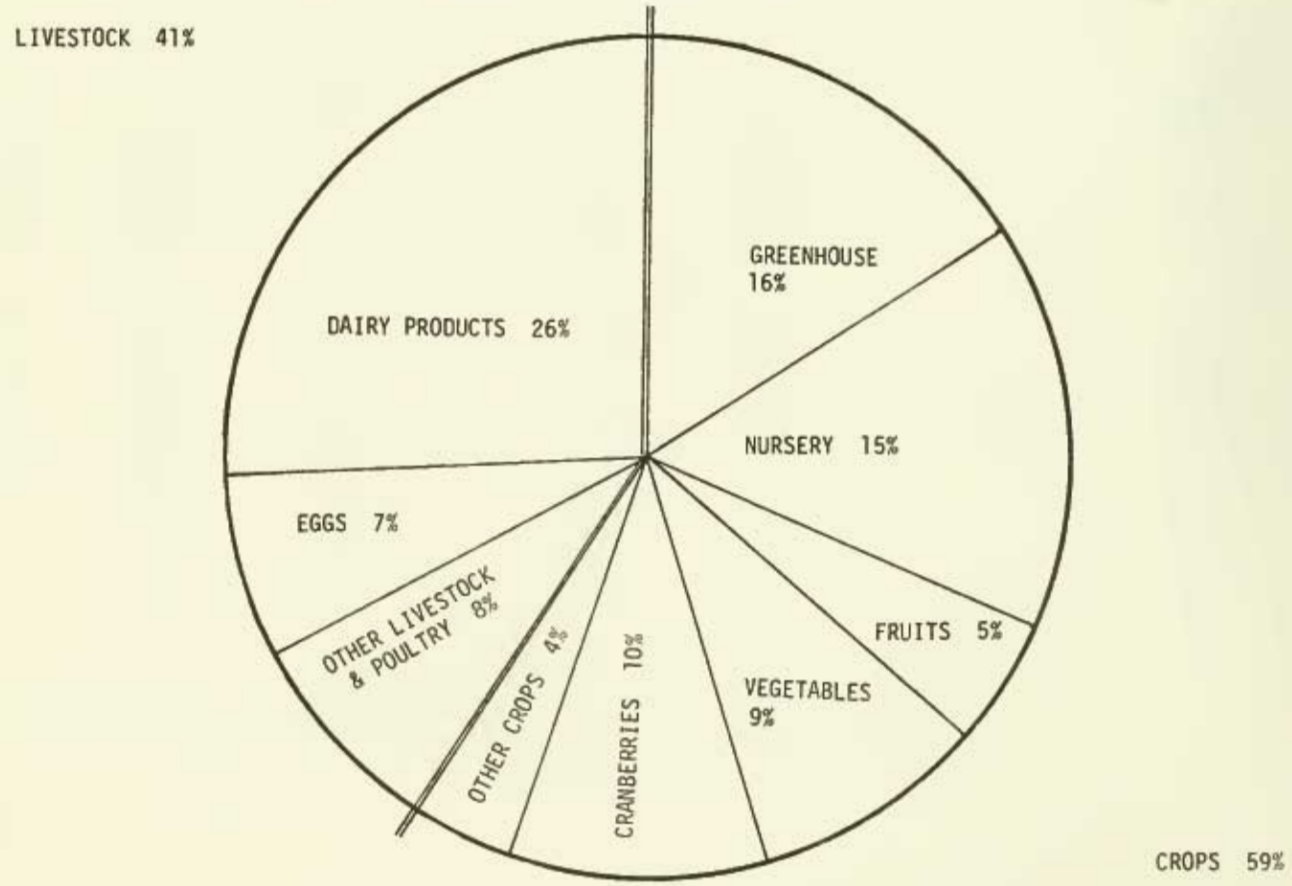
REALIZED GROSS AND NET INCOME FROM FARMING: MASSACHUSETTS, 1950-1979

ITEM	1950	1955	1960	1965	1970	1975	1977	1978	1979
	Million Dollars								
Cash Receipts From Farm Marketing	181.6	172.5	164.7	160.2	156.9	201.5	223.8	246.6	255.7
Government Payments	.6	.4	.7	.6	.6	.6	.6	.8	.6
Non-Money Income	19.3	15.4	15.5	12.3	13.3	21.3	24.8	27.0	29.2
Other Farm Income	.1	.6	.7	1.2	1.5	3.2	3.2	3.5	4.3
Gross Farm Income	201.6	188.9	181.6	174.5	172.3	226.5	252.3	277.8	289.7
Farm Production Expenses	147.2	138.3	135.6	127.4	132.0	191.2	207.2	217.7	245.4
Realized Net Farm Income	54.4	50.7	46.1	47.0	40.4	35.3	45.2	60.2	44.4
Net Change Farm Inventories	-2.1	-1.2	1.3	-.5	.2	-1.3	-32.2	-.9	4.2
Total Net Farm Income	52.3	49.5	47.3	46.5	40.6	34.1	12.9	59.3	48.6
Estimated Number Farms (000)	29.1	18.0	13.0	8.7	6.2	5.8	6.2	5.9	6.2
Average Net Farm Income (dollars)	1,797	2,750	3,639	5,345	6,548	6,200	2,087	10,043	7,835

CASH RECEIPTS FROM FARM MARKETINGS, MASSACHUSETTS, 1978-1980

COMMODITY	1978	1979	1980
		Thousand Dollars	
HAY	2,242	2,463	2,375
TOBACCO	8,860	8,404	10,833
POTATOES	4,495	4,810	4,134
CABBAGE	1,127	878	1,237
SWEET CORN	4,438	5,817	5,763
TOMATOES	2,529	2,386	3,103
MISCELLANEOUS VEGETABLES	15,104	15,032	13,374
APPLES	13,050	11,793	13,092
PEACHES	493	544	570
CRANBERRIES	25,488	27,972	30,562
BERRIES	1,403	1,611	1,365
MISCELLANEOUS FRUITS	243	249	260
MAPLE PRODUCTS	367	445	288
FOREST PRODUCTS	1,189	1,308	1,308
GREENHOUSE & NURSERY	84,077	92,447	94,440
MISCELLANEOUS CROPS	104	121	127
TOTAL CROPS	165,209	176,280	182,831
CATTLE & CALVES	11,404	12,727	10,298
HOGS	7,488	7,841	5,988
SHEEP & LAMBS	214	163	178
DAIRY PRODUCTS	67,350	73,833	79,279
CHICKENS	1,288	653	328
EGGS	19,021	20,638	20,177
TURKEYS	2,035	1,820	1,927
MISCELLANEOUS LIVESTOCK & POULTRY	5,455	5,762	5,471
TOTAL LIVESTOCK	114,255	123,437	123,646
TOTAL ALL COMMODITIES	279,464	299,717	306,477

MASSACHUSETTS CASH RECEIPTS - 1980



UNITED STATES: CIVILIAN PER CAPITA CONSUMPTION OF MAJOR FOOD COMMODITIES, 1970-1979 1/

Commodity	1970	1973	1974	1975	1976	1977	1978 2/	1979 2/
				Pounds				
Meats:	151.4	142.6	152.5	145.4	155.3	154.6	149.7	147.7
Beef	84.1	81.1	86.4	88.9	95.7	93.2	88.9	79.6
Veal	2.4	1.5	1.9	3.5	3.3	3.2	2.5	1.7
Lamb and Mutton	2.9	2.4	2.0	1.8	1.7	1.5	1.4	1.4
Pork	62.0	57.6	62.2	51.2	54.6	56.7	56.9	65.0
Fish (edible weight)	11.8	12.9	12.2	12.3	13.0	12.8	13.4	13.7
Poultry Products:								
Eggs	39.5	37.3	36.6	35.4	34.8	34.5	35.2	35.7
Chicken (ready-to-cook)	40.5	40.7	41.1	40.6	43.3	44.9	47.7	51.8
Turkey (ready-to-cook)	8.0	8.5	8.9	8.6	9.2	9.2	9.4	10.2
Dairy Products:								
Cheese	11.5	13.7	14.6	14.5	15.8	16.4	17.3	18.1
Condensed and evaporated milk	7.1	6.0	5.6	5.0	5.0	4.5	4.2	4.4
Fluid milk and cream (product weight)	296.0	293.0	288.0	291.1	292.0	288.4	285.9	284.2
Ice Cream (product weight)	17.7	17.5	17.5	18.7	18.1	17.7	17.8	17.7
Fats and Oils--Total Fat Content	53.0	54.3	53.2	53.4	56.1	54.4	55.6	57.6
Butter (actual weight)	5.3	4.8	4.6	4.8	4.4	4.4	4.5	4.5
Margarine (actual weight)	11.0	11.3	11.3	11.2	12.2	11.6	11.4	11.6
Lard	4.7	3.4	3.2	3.0	2.7	2.3	2.2	2.3
Shortening	17.3	17.3	17.0	17.3	18.1	17.6	18.2	19.2
Other edible fats and oils	18.2	20.8	20.3	20.3	22.0	21.6	22.6	23.4
Fruits:								
Fresh	79.3	74.2	76.9	81.3	83.7	79.6	81.6	80.5
Citrus	28.1	26.9	27.1	28.7	28.5	25.2	26.3	24.3
Noncitrus	51.2	47.3	49.8	52.6	55.2	54.4	55.3	56.2
Processed:								
Canned fruit	23.3	21.3	19.6	19.3	19.2	20.0	19.0	19.2
Canned Juice	14.6	15.9	14.6	16.2	16.2	15.6	17.4	17.4
Frozen (including juices)	9.8	11.2	11.2	12.6	12.2	11.8	11.3	12.3
Chilled citrus juices	4.7	5.3	5.2	5.7	6.2	5.8	6.4	6.4
Dried	2.7	2.6	2.4	3.0	2.6	2.5	2.0	2.2
Vegetables:								
Fresh 3/	91.0	93.0	95.0	94.1	94.2	91.8	93.3	97.2
Canned	53.0	57.7	56.9	55.1	55.7	56.2	54.1	55.0
Frozen (excluding potatoes)	9.7	10.7	10.2	9.7	10.2	10.3	10.8	11.1
Potatoes 4/	115.3	114.4	112.3	120.3	114.4	119.8	122.9	123.0
Sweetpotatoes 4/	5.2	4.6	4.9	5.0	4.9	4.5	5.0	5.0
Grains:								
Wheat flour 5/	110.0	112.0	110.0	113.0	118.0	114.0	115.0	112.0
Rice	6.7	7.0	7.6	7.7	7.2	7.6	5.8	9.2
Other:								
Coffee	10.4	10.1	9.5	9.0	9.4	6.7	7.9	7.8
Tea	.7	.8	.8	.8	.8	.9	.7	.7
Cocoa	3.1	3.4	3.0	2.6	3.0	2.7	2.7	2.7
Peanuts (shelled)	5.9	6.6	6.4	6.5	6.3	6.6	6.6	6.6
Dry edible beans	5.9	6.4	6.7	6.5	6.3	6.1	5.9	6.1
Melons	21.2	19.8	17.1	17.3	18.6	19.3	20.1	18.9
Sugar (refined)	101.8	101.5	96.6	90.2	94.7	95.7	93.1	91.3

1/ Quantity in pounds, retail weight unless otherwise shown. Data on calendar year basis except for dried fruits, fresh citrus fruits, peanuts, and rice which are on a crop-year basis. 2/ Preliminary. 3/ Commercial production for sale as fresh produce. 4/ Including fresh equivalent of processed. 5/ White, whole wheat, and semolina flour including use in bakery products.

MASSACHUSETTS: ESTIMATED TOTAL POPULATION, July 1, 1950-1979 1/

Year	Total Population	Year	Total Population
1950	4,691,000	1976	5,769,000
1960	5,149,000	1977	5,768,000
1970	5,697,000	1978	5,771,000
1975	5,778,000	1979 2/	5,769,000

1/ U.S. Department of Commerce, Bureau of the Census.
2/ Preliminary.

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At the conclusion of Fiscal 1981, the Agricultural Preservation Restriction Program has purchased restrictions on 19 properties involving 1556 acres of farmland. They were located in 10 counties and 16 municipalities. Another 15 properties with 1247 acres of land were under signed purchase agreements. The goal of retaining a farmland base for Massachusetts food and livestock production is becoming realized. In addition, the benefits of the rural landscape and farm employment in many municipalities are being maintained.

The Program provides farmland owners the opportunity to realize the value of their property's "development rights" without the land being taken out of production or developed. The Commonwealth compensates the landowner for his willingness to place a permanent restriction on his land prohibiting all non-farm uses and allowing for only agricultural uses. The land, once restricted, is still privately owned and it can be leased, sold, devised, etc., but only for agricultural purposes.

Farmers and other farmland owners voluntarily apply to the Program for consideration. Following review of the application by Department staff,the property is field inspected and then presented to the Agricultural Lands Preservation Committee for action. If approved, the application will become a finalist and an appraisal of the property's market value and agricultural value will be conducted. The landowner is offered the difference between the market value and agricultural value. If the landowner concurs, a final vote of the Committee is needed. Following a successful vote, the purchase agreement is signed and a title search is completed. Once clear title is established, the landowner is compensated for the restriction that is recorded with his deed.

The Program is one of five state programs now operating in the country. They include New Jersey, Maryland, Connecticut, New Hampshire and Massachusetts. Several county programs are also active. Purchasing development rights/restrictions is one of the few permanent solutions available for preserving productive farmland.

At the end of the 1981 fiscal year, over 235 applications had been submitted to the Department of Food and Agriculture for funding consideration. The applications represented 121 cities and towns in 12 counties across the Commonwealth. A total of over 22,000 acres have been proposed for restriction with asking prices exceeding $55 million.

A total of $15 million has been appropriated to the Program, but as seen above, this sum falls far short of the application demand. A $10 million request has been made in the 1982 Capital Outlay Budget. An annual appropriation is needed to satisfy demand for the Program and to maintain administrative continuity.

Total program expenditures at end of the fiscal year amounted to $3,197,035. On the average, the cost of restricting Massachusetts farmland is $2000 per acre. Fifty-five additional properties involving over 5000 acres are under appraisal for Program consideration. Fiscal 1982 should be a successful year for farmland preservation in Massachusetts.

Agricultural Preservation Restriction Program
From January 1, 1979 to June 30, 1981

County	Number	Acreage	No.of Cities & Towns Represented	Asking Price
Barnstable	1	65	1	$ .3 million
Berkshire	10	1794	6	2.4 million
Bristol	21	1755	11	6.2 million
Dukes	4	342	3	1.5 million
Essex	29	2610	12	13.3 million
Franklin	15	1573	7	1.9 million
Hampden	11	1162	7	1.7 million
Hampshire	35	3529	10	3.6 million
Middlesex	31	1967	17	10.2 million
Norfolk	15	812	9	2.0 million
Plymouth	22	2411	13	5.6 million
Worcester	43	5728	25	8.6 million
State Total	236	23,069	121	$57.3 million

Update as of December 31, 1981:

37 farm properties protected totalling 3261 acres.
5 farm properties under purchase agreement totalling 563 acres.
43 farm properties under appraisal totalling 5100 acres.

Total in Process:

95 farm properties totalling 8924 acres.

DIVISION OF AGRICULTURAL LAND USE
Susan Redlich, Director

The Division of Agricultural Land Use works to promote the wise use of the natural resources essential to agriculture--land, soil, and water--and to ensure the protection and availability of these resources for those who work the land, both rural and urban. The fragile and finite nature of these natural resources necessitates their long term conservation in order to produce food for the citizens of the Commonwealth, maintain the viability of the farm economy, and safeguard the quality of our natural environment.

To further these objectives, during the past year, the Division was instrumental in the formation of the Suffolk County Conservation District, which will enable interested residents of Suffolk County to become involved in the conservation of the land, soil, and water of Suffolk County. The Division also facilitated the distribution and planting of thousands of food bearing trees and shrubs on public lands as part of the Massachusetts Fruition Program. The Massachusetts Seed Program was also effectively carried out and this program provided low-cost seeds to low income, elderly, and beginning gardeners, greatly facilitating home food production.

The Division has also been involved with an extensive natural resource mapping project of state-owned institutional lands. The maps will be used in making planning decisions for the future use of these properties. By carrying out its numerous projects and activities, the Division also provided training and educational opportunities for a number of student interns.

The Division continued to coordinate and promote Boston area farmers markets, and organize and secure land for community gardens. The Division also takes an active role in the state's environmental review process and advocates the protection of agricultural land.

Since the control and/or eradication of major domestic animal diseases is the goal and purpose of the Division of Animal Health, our success directly affects the prices we pay for food, clothing, and our own good health. Caught between the horns of inflation and transportation, farmers must rely on efficient disease control if they are to produce the food we need. This is an important area, one in which the government profits both the producer and the consumer.

In past years, this Division has functioned with four Veterinary Health Officers, ten Animal/Poultry Inspectors and an office staff of fourteen. Retirements, hiring freezes and a reduction in positions have left us with a working complement of fifteen. Although we have been fortunate to have had help from USDA-APHIS and to have had no important new disease outbreak, our resources are at this point, strained far beyond the safety point.

BRUCELLOSIS

This disease in both cattle and swine affects human health in the form of Undulant Fever. Its total eradication in Massachusetts is within our grasp. A very large loose-housed and chronically infected herd was removed from quarantine this year and has remained disease-free for more than three months. Two small herds came up infected. One was depopulated and infection brought swiftly under control in the second. We confidently hope to be disease-free in bovine brucellosis within calendar 1981. Well over half of the State is also disease-free in swine brucellosis. Since we are now the only New England State with a problem in this area, we have given its eradication high priority. Failure to pass a particular piece of legislation continues to hamper our efforts with swine brucellosis.

TUBERCULOSIS

Another disease with high human-health impact, tuberculosis, is resurgent in the world, particularly in its cities. Eradication remains a continuing program; laxity will guarantee a problem. Our dairy herds are currently on a three year testing rotation, with a number tested oftener. A total of just under 43,000 animals (in over 800 herds) were tested with no reactors revealed. This is one of our two highest priority programs, one for which our low field staffing can cause problems. We require two more years of complete freedom from this disease in order to qualify as a tuberculosis-free state. This rating would mean a great deal to our farmer-producers as well as to all of New England. Few people realize the incidence of disease, in particular Tuberculosis and Brucellosis, is lower in the Northeast than in any other portion of the country, but constant surveillance will be necessary to maintain a desirable position.

HOG CHOLERA AND RELATED DISEASES

The entire nation has been free of this disease for two years, but since it is endemic in neighboring countries, constant effort is expended in prevention.

Hog Cholera, Swine Pseudorabies and Vesicular-Exanthema may be transmitted through the feeding of un-cooked garbage to swine and the law we have which mandates such cooking is our primary prevention and control procedure. We are indebted to USDA-APHIS for all swine-testing conducted here.

EQUINE PROGRAM

Massachusetts requires a negative Coggins Test (for Equine Infectious Anemia) to be conducted within six months prior to entry. Just under 11,000 such tests were conducted with seven positives. Since this disease is now of such a low incidence here, we have lengthened to 24 months the test period required for Massachusetts-owned horses to be shown here. This relieves the horse owner of a necessity of an annual test and will not, we feel, contribute in any way to the spread of this disease. As always, we sent out press releases urging horse owners to vaccinate their animals against Eastern-Western Encephalitis. No equine deaths from this were confirmed in this state though several occurred in nearby New Hampshire.

Licensing of Riding Schools and Stables (an animal protective device) and Horseback Riding Instructors, considered a consumer protective measure, continues, though the position of supervisor of Riding Academies has been unfilled for two years. Agents of the Massachusetts SPCA conduct the surveillances for us with regard to stable licensing. These two programs are important sources of revenue for this Division.

PET SHOP LICENSING

The licensing of Pet Shops is primarily a disease control measure, especially in the area of parrots and other psittacine birds. Recent outbreaks of VVND (Velogenic Viscerotropic Newcastle Disease) in parrots have allowed USDA-APHIS agents to trace every exposed bird sold into Massachusetts Pet Shops. Since this disease has the capability of wiping out the domestic poultry industry, we have good reason to thank the pet shop owners in general for their interest and co-operation in this regard.

RABIES

This disease remains endemic in the wildlife population and remains a constant, though admittedly low-level, threat to residents of this State. Since skunks remain a source, their sale as pets was made illegal a year ago. This Division initiates the quarantine of any animal which has bitten a person. More than 6,000 quarantines were completed. More than 600 animal brains were submitted to the Wasserman Laboratory for definitive rabies analysis.

POULTRY

This section of the Division has been hurt severely by two retirements. We're only four field men to blood test (105,000 birds tested) to inspect at shows and fairs (29 shows), to do retail store inspections (over 2,700 stores inspected), to check on Massachusetts-Grown-And Fresher logo use, to conduct USDA-Egg Products Act inspections and to take care of a myriad of other poultry diseases. This section is severely under-manned. Our State remains officially pullorum-clean and we are very proud of the work these men do, as well as the co-operation of the State's producers, but maintaining a disease-free status in the poultry industry with four men may not prove possible.

CONCLUSION

Our co-operative agreements with the United States Department of Agriculture-Animal Plant Health Inspection Services (USDA-APHIS) have proven invaluable in attaining our present high-degree of freedom from diseases such as Brucellosis and Tuberculosis. The agents of MSPCA have helped us enormously with pet shop work and all of our equine programs. We are indebted to the Farm Bureau Federation for their legislative help. The licensed veterinarians who conduct fee-basis tests and vaccinations for us have made it possible to cover the State far more closely than ever would have been possible without them. The office of the Division of Animal Health is severely under-staffed.

We hope against considerable odds to be able to maintain a high position of freedom from disease in our domestic flocks. We and the farmers and the producers we serve recognize the need for financial responsibility, but a major disease outbreak could and would cost far more than present savings could ever justify.

The Division of Animal Health's budget for fiscal year 1981 was $462,400 which included funding the Division of Poultry.

In fiscal year 1981 there were no major changes in the agricultural laws. There were, however, seven amendments to the law, some of them significant to those affected.

Ch. 378 of the Acts of 1980 was entitled "an Act further regulating certain agricultural land use." What it did in effect was add a definition of "Arbor". The definition reads as follows: "An area of land devoted to the propagation and cultivation of fruit bearing trees and shrubs and nut trees." This amendment authorized the Division of Land Use to purchase such trees and shrubs and plant them in various places throughout the Commonwealth.

Ch. 397 provided that the employees of Suffolk County Cooperative Extension Service may participate in the Commonwealth's group insurance program.

Ch. 428 provided that the Board of Veterinary Medicine shall have the authority to grant to the Veterinary School in Grafton an institutional license under which veterinarians who are not otherwise licensed may practice veterinary medicine if such practice is conducted in conjunction with their full time employment at the school.

Ch. 430 provided that all dogs and cats shipped into the Commonwealth for commercial resale shall be inoculated against distemper and that such dog or cat be accompanied by an official health certificate, a copy of which must be sent to the Commissioner of Food and Agriculture. It also provided that no pet shop shall import into the Commonwealth any cat or dog less than eight weeks of age.

Ch. 475 provided that the Department of Mental Health shall lease to the Department of Food and Agriculture for a period of ten years with an option to renew certain lands at the Belchertown State School.

Ch. 557 was an Act clarifying exemption of tractors used by farmers from the sales tax. It provides that the tax shall be imposed only on the difference between the sales price of the vehicle purchased and the amount allowed on the vehicle traded in on such purchase.

Ch. 59 of the Acts of 1981 provides that, subject to the rules promulgated by the Commissioner of Food and Agriculture, the Director of Animal Health may prohibit the importation of female cattle for breeding purposes over five months of age without an official certificate of vaccination.

J. Peter Griffin, Director

Both consumers and dairy farmers benefit from the strict health and sanitation laws and regulations affecting the supply of milk in the Commonwealth. Under the law, dairy farms in the state selling milk here as well as those out-of-state shipping milk into Massachusetts must be inspected and licensed. This program helps ensure a wholesome product to consumers and a continually desirable and marketable product for farmers.

The flavor of milk is quality checked by another departmental program carried out under the Division of Markets.

The number of dairy farms licensed by the Division of Dairying in the last ten years has dropped by about 22 percent. This decrease is offset, however, by an increase in the size of existing farms.

The geographical area covered in the inspection of these farms has also broadened farther and farther, particularly into New York state. Larger farms with more equipment that is also more complicated, and fewer inspectors with greater mileage to cover, have made our work extremely frustrating.

We made approximately 7500 "original farm inspections" and approved 79 percent during the 1981 fiscal year. Those farms not approved were later reinspected and most were approved. Others went out of business or changed to markets not requiring Massachusetts licensing. We have attempted to approve or recommend exclusion on the first reinspection. This has worked reasonably well at saving time and expense, and has helped in upgrading the overall farm conditions.

Our four mastitis sample collectors sampled approximately 750 herds, 46,000 cows and collected approximately 181,000 milk samples which they delivered to the diagnostic laboratory at the University of Massachusetts in Amherst. These samples were analyzed and the results forwarded to the herd owners and their veterinarians. If the farmer follows the recommendations resulting from the laboratory analysis of his milk samples, he can save hundreds of dollars that otherwise would be lost to reduced milk production, reduced cow value, and veterinary expense.

Our USDA work has been curtailed this year due to the shortage of manpower. We were unable to complete a request from the USDA for resampling Non-Fat Dry Milk in Lawrenc during the month of August. The Syracuse office of USDA agreed to do the work until we were again able to, or until the cooperative agreement was terminated. We have continued, however, to do the weighing and sampling of dry milk being offered to the Commodity Credit Corporation by Agri-Mark, Inc. from their West Springfield plant. The income from this work for the year was $6,537.36, down from the previous year income of $9,664.30.

A total of 73 milk plants were inspected by the Division this year. Twenty-five of these were pasteurization plants located outside the Commonwealth. Others were receiving plants or stations located throughout the Massachusetts milk shed.

Division personnel certified by the U.S. Public Health Service as milk sanitation rating officers completed all industry requests for interstate milk shipper ratings.

The appropriated budget for the fiscal year was $266,066.

DIVISION OF FAIRS
Stephen F. Quinn, Director

The fairs, as a whole, enjoyed a rather good season and with the lack of rain through the summer most fairs enjoyed increases in attendance. The large increase in the total is due to the rejuvenation of the Brockton, Middleboro and Weymouth fairs. Their added attendance was up over 300,000. With good weather and an increase in prize monies, exhibits were able to show a large increase over last season; the total also broke records which were set the previous year.

With gas prices stabilizing there was no problem getting about; however due to the cost, a trend seems to be setting in where people are partaking in more nearby functions for their entertainment.

All looks well for the immediate future for the Agricultural Fairs.

2,929,656 people paid admissions in 1980 to one of the various agricultural fairs conducted within the state. This figure is up 512,255 from last year. $264,581 were expended for prizes by the state and $121,634 were added by the fairs for the promotion of agriculture. 89,217 exhibits were displayed, 38,186 of which were youth; these figures are up 20,012 and 5,728 respectively from 1979.

The Massachusetts Building exhibits at the Eastern States Exposition in West Springfield again enjoyed a tremendous reception from the 1,090,000 people who visited the "Big E." This year's theme adopted the new logo of the State Department of Commerce and Development, "Make it in Massachusetts." New exhibits from the Extension Service, Massachusetts Horticultural Society and the Department of Agricultural Stabilization Conservation Service, along with the expanded exhibits of the Massachusetts Flower Growers, Hampden County Bee Keepers and the Commerce Department gave a much needed change to our building.

The Division again employed the use of 12 part-time fair inspectors to help aid the Division in its monitoring of the agricultural prizes and the use of the rehabilitation funds.

REHABILITATION PROGRAM

The Rehabilitation Committee met in the West Springfield office of the Department. It first adopted the revised guidelines for allotting monies to fairs, then proceded to approve $104,135 from requests of $445,460 to 41 fairs.

The Division this year also participated in re-establishing the "Wool Blanket Program". Meetings last winter with interested wool growers were held to reactivate this unique marketing opportunity. The Division was instrumental in organizing and incorporating the "Massachusetts Wool Board" as a non-profit corporation for the promotion of wool and lamb products within the Commonwealth.

Over 14,000 pounds of raw wool were collected at three pooling sites across the state. The wool was sent to the Charlton Wool Mills for weaving and is due some time in December. Through the manufacturing of the wool into blankets, a readily marketable product, it is our goal to pay the growers a higher price for their wool than otherwise could be achieved. All is proceeding well.

FINANCIAL REPORT -- DIVISION OF FAIRS

The total appropriated budget for the fiscal year was $710,300. Of this total, $422,800 were appropriated for the fair prize awards, fair inspections, promotional programs and administrative costs; $87,500 were appropriated for the rehabilitation program, up $12,500 over last year, and $200,000 for the Thoroughbred and Standardbred Programs.

The Massachusetts Breeding Program, enacted into law in 1969, provides cash awards of 20 percent of purse won, to breeders of horses that finish 1st, 2nd, 3rd in pari-mutuel running horse races within the Commonwealth. An additional award of 5 percent of purse won is paid to the owner of the stallion which sired said horse and stands the entire breeding season in the state, and is registered with the Massachusetts Department of Food and Agriculture.

The purpose of the program is to encourage the breeding of Thoroughbred horses in the state, and to maintain open spaces and promote agriculture.

During the 1981 fiscal year, 1284 Massachusetts bred Thoroughbreds started at Suffolk Downs and four agricultural fairs. These horses accounted for 128 wins, 143 2nds, and 145 3rds, indicating that Massachusetts breds are definitely competitive in open racing.

Breeder incentive awards amounted to $123,777, and stallion owner awards were $15,089 for the fiscal year. A deficiency budget of $20,000 was filed as the annual appropriation was not enough to cover the monies due for the awards.

Over 200 Thoroughbred mares were bred to Massachusetts stallions in this period, and the number of Thoroughbred stallions standing in Massachusetts increased from 40 to 45.

The formation of the Massachusetts Thoroughbred Breeders Association Inc. was a positive step for horse farmers, as an organized breeders group was needed to present a solid front to the state legislature in procuring positive legislation for the Massachusetts horse breeder. The new breeders association has, in fact, filed legislation that, if enacted, would create a healthy financial climate for the neophyte horse farmer.

STANDARDBRED PROGRAM
Barbara E. Dolloff, Supervisor

The Standardbred Horse Breeding Program encourages and promotes the breeding, propagation, ownership, raising, racing and marketing of Standardbred horses bred in the Commonwealth of Massachusetts. Thus it encourages the keeping of open lands to promote agriculture and agricultural related industries within the Commonwealth.

There was a slight decrease in the number of stallions registering to stand in service in the Commonwealth. This was due to a new registration fee of $100 per stud, imposed by the Massachusetts Standardbred Breeders and Owners Association. The 43 stallions that were registered are of better quality, however, and many outside mares were brought in to be mated with them. This should produce a more marketable foal than in the past. It should be stated here that the program has been producing some outstanding foals and is growing, but with this new stallion band, we look forward to a much improved crop overall. This crop will be eligible to race in the sire stakes program of 1984.

There were 106 two and three-year old horses eligible, according to class, to 59 events at 8 fairs. Of this figure, 51 horses did participate. Purse payments including entry fees totaled $82,914.

Legislation was introduced this past spring, to enhance the breeding program. If this is passed by the legislature and signed into law by Governor King, it can be projected that a rapid growth will occur. Many owners of Standardbred stallions and mares are anxiously awaiting passage of this legislation, so that they may return their stock to the Commonwealth and participate in a viable program.

The function of the Division of Markets is to create the best possible climate for the state's agricultural products and to help with a variety of programs aimed at insuring that these products do move through marketing channel phases in an orderly manner.

The marketing of farm products in Massachusetts involves cash receipts to farmers of more than 300 million dollars and an agribusiness worth several billion dollars annually. Food stores represent the largest retail business in Massachusetts, with some 5714 food stores generating sales of over four billion dollars.

The Division role includes providing certain essential market information, shipping point inspections, timely product promotion, consumer protection and regulatory services.

AGRICULTURAL COMMODITY PROMOTIONS - Guy L. Paris

Funds from this account are allotted to commodity associations for the purpose of promoting Massachusetts agricultural products.

Rules and regulations specify that each commodity group receiving promotional funds must submit affidavits of promotional program expenditures, with comments regarding the usage of these funds eight months after receipt of said funds.

The Division of Markets was allotted $85,000 to disperse to commodity groups. Many of these commodity groups raised money from their own members to exceed four times the amount they received from the Department. The original sum of $85,000 grew to $350,000 which was spent for the promotion of Massachusetts agricultural products through various commodity promotional programs.

DIVISION PROMOTIONAL ACTIVITIES

The objectives of Divisional promotional programs are to continue and expand the use of the "Massachusetts Grown and Fresher!" trademark.

Many of the consumers in the Commonwealth are aware of this logo and are insisting that retailers offer Massachusetts grown produce bearing the logo.

One retailer tested consumer preference regarding film bagged carrots; those marketed with the logo outsold the unmarked ones by five to one.

We are beginning to see more large food markets advertising "Massachusetts Grown and Fresher!" in their newspaper ads, which include flowers and eggs as well as fruits and vegetables.

The Division provides retail outlets with "Massachusetts Grown and Fresher!" printed material, assists in their promotional programs and offers suggestions in their advertising.

The Division activities also included the following:

Exhibited at the Massachusetts State Building during the Eastern States Exposition.

Designed and constructed a 17th Century Herb Garden at the Boston Common during the Boston 350th Jubilee.

Designed and constructed a commercial greenhouse displaying hydroponically grown vegetables at the New England Flower and Garden Show. The Department received a gold medal for this exhibit.

Conducted a "Taste of Massachusetts" exhibit at the New England Hotel-Motel and Restaurant Show; also supervised the Massachusetts Chicken Cooking Contest during the show.

Exhibited at Commonwealth Pier during National Port Day.

Assisted with the development of Massachusetts Horticultural Coop, Inc., a farmers flower market coop at the New England Produce Center.

Planned a seminar on the opportunities for produce wholesaling at Gardner Auditorium at the State House which was attended by Governor Edward J. King, Environmental Affairs Secretary John A. Bewick, Food and Agriculture Commissioner Frederic Winthrop, Jr., several executives of retail food supermarkets, retail market produce buyers, wholesale produce commission merchants, as well as many fruit, vegetable, flower growers and egg producers.

The Division also promoted Massachusetts agriculture through the publications of information pamphlets listing local "Pick-Your-Own" vegetables, strawberries, blueberries, apples and other fruits, "Cut-Your-Own" Christmas trees, Massachusetts turkey farms and locations of Massachusetts Farmers and Gardeners markets.

MARKET NEWS

The Division cooperates with the U.S. Department of Agriculture collecting, publishing and distributing by telephone, mail, radio and newspapers, timely information on market supplies and demand, commercial movement, and daily market prices at the Boston Wholesale Fruit and Vegetable Market, the Boston Flower Exchange and the Springfield Farmers Market. It is through market reports that growers, retailers, and shippers are informed of marketing conditions and prices. Many of today's prices are established in retail food and flower stores throughout Massachusetts based on information received by Market News reports.

Great care is taken to make these reports complete, accurate and readable. Also, all employees of the Market News section must be ready to answer any questions on marketing and other agricultural topics. They must be knowledgeable of the functions and the responsibilities of the Department of Food and Agriculture, so they can refer people to the proper divisions when asked.

Market News publicationsinclude a weekly Special Apple Report outlining apple storage holdings, wholesale market prices, f.o.b. apple prices, and movement of apples at the wholesale market place and also on the farm. A consumers' weekly Buyers Guide listing retail prices of fruit, vegetables, meat, poultry, eggs, and fish informs consumers of the current retail prices for these commodities. This report also assists the farmer who grows or produces these products in determining the price he should charge at his stand or farmers markets.

PUBLIC INFORMATION - Janet Christensen

Communicating to the public the most current facts concerning the agricultural situation in Massachusetts and related activities of the Department is the major goal of this program.

As the most efficient means of reaching the largest number of people is through the mass media, the important events and issues are explained in press releases for distribution to newspapers, radio and TV stations and various trade publications.

The public information officer assists representatives of the press on any inquiries concerning Department activities or food and agricultural topics, referring calls to subject matter specialists in the Department or other agencies when necessary.

The protection of farmland in Massachusetts is of great concern to those involved with agriculture, and this issue and the goals of the Agricultural Preservation Restriction Program must be brought to the public's attention.

Efforts to encourage related interviews and stories in the print and broadcast media have been well received.

Informing the public about Massachusetts grown crops and their availability is another key assignment. The series of leaflets on the nutrition and use of various local vegetables and fruits which was developed over the past few years has gained wider distribution through cooperation with the New England Vegetable Growers Association.

Publicity concerning farmers markets has added considerable emphasis to the entire "Massachusetts grown" campaign. With the assistance of student interns, a list of market locations, times and dates is compiled each year and a concerted effort is made to advise the public. The public information officer serves on the Board of the Massachusetts Federation of Farmers and Gardeners Markets.

She also prepared food demonstrations on local crops for the Sharon King Program on WBZ-TV as well as the Massachusetts New England Hotel, Motel and Restaurant Show.

Mutual interests and goals of public information officials in the Northeast and the U.S. were furthered through meetings of their regional and national associations. This year the Public Information Officer served as President of the Communication Officers of State Departments of Agriculture.

The TV public service announcements featuring Commissioner Winthrop promoting the summer harvest of Massachusetts grown crops were again distributed and used by TV stations across the state.

The Public Information Officer also promoted the observance of American Agriculture Day on March 19, 1981 and informed the press about the two significant events planned -- the Direct Wholesaling Seminar at the State house and the signing by Governor King of an Executive Order to protect state owned agricultural lands.

Other current topics covered in press releases and brochures concerned animal health, community gardens and insect nuisance and plant pest problems such as the gypsy moth and the Mediterranean fruit fly.

ROADSIDE MARKETING - Craig Richov

Roadside marketing represents a $30 million industry in Massachusetts and 1980 estimates put the number of roadside stands and markets at over 700. Working closely with market operators as a marketing consultant is the Department's Roadside Marketing Specialist. To help keep Massachusetts a leader in direct marketing, the specialist writes a bimonthly newsletter to inform growers of marketing trends and retailing techniques. His attendance at the National Direct Marketing Conference in Washington, D.C., the New York State Roadside Marketing Conference in Kingston, New York and the New England Apple Institute's Roadside Marketing Conference in Springfield, helped keep him aware of current problems and breakthroughs in the industry.

The Roadside Marketing Specialist also provided services to growers who requested his assistance in establishing retail marketing outlets and in improving the operation of existing markets. Plans for new roadside markets were provided in Stow, Ipswich and Holden, and improved market layouts were worked out for over 20 stands across the state. The advice and recommendations given to growers serves to upgrade the appearance, image and effectiveness of farm markets in Massachusetts. The Massachusetts farm families and their products have been a continuing source of pride for the entire Commonwealth.

Promotional activities of the marketing specialist included the distribution of "Massachusetts Grown and Fresher" publicity materials and assistance with the Massachusetts Vegetable Growers Association's "Vegetable of the Week" promotion program. As chairman of the Massachusetts Federation of Farmers and Gardeners Markets' promotion and exhibit committee, he also promoted farmers markets through informative exhibits and live farmers markets at the Eastern States Exhibition in West Springfield and smaller fairs and functions throughout the year.

FARMERS MARKETS

From the Cape to the Berkshires, farmers markets increased in popularity with both buyers and sellers.

As well as offering vegetables, many markets also sold other items such as fresh strawberries and raspberries in season, basil, mint, eggs, honey, maple syrup and flowering plants.

Over the past few years, farmers markets have mushroomed across Massachusetts, increasing from some seven locations in 1976 to the current total of forty-four. More local farmers each year are selling direct to the consumer at urban and suburban farmers markets, while more shoppers are enjoying their convenient locations and excellent products.

The state Food and Agriculture Department also encourages farmers in "direct marketing" at roadside farm stands and in direct sales to supermarkets, institutions and the restaurant trade. Growers or potential buyers are urged to contact the Department's Division of Markets at (617) 727-3018 for assistance.

FOREIGN TRADE SECTION - Schiva Gandhi

The number of Massachusetts agribusiness firms participating in the export programs of the Division of Markets has remained fairly stable in this fiscal year. There are approximately 100 firms ("new-to-export" or experienced exporters) utilizing the services and resources of the Foreign Trade Section. However, it has been noticed that these firms were much more active this year in utilizing the various services provided by this Section. Moreover, there has been a marked increase in enquiries on agricultural statistics, the latest developments in foreign markets and other information relating to foreign trade by individuals thinking of entering the export market.

A major source of their interest has stemmed from reading about the various trade shows and exhibits. The Foreign Trade Section periodically mails out particulars about a trade show that might be of interest to Massachusetts exporting firms to establish new global markets or enlarge the market for their products in their current global area of concentration. One such trade show that this Section is currently concentrating on disseminating information about is The United States International Food Show (USIFS), to be held in New York Coliseum April 14-18, 1982. This is the first large-scale and most comprehensive international food exhibition ever staged in this country. Already a large number of representatives of food manufacturing companies and processors, as well as official organizations in all sectors of food and drink industry have indicated that they are eager to participate in the USIFS, for it provides them with an ideal opportunity to introduce new products, identify new markets and new trends in food processing, as well as boost sales in national and international markets.

A greater number of "new-to-export" firms are finding that an easy way to introduce their products to food buyers in a large number of countries, at no cost, is through the monthly newsletter CONTACTS for U.S. Farm Products. To participate in this program the export representative of a firm describes the product in 100 words or less, including the firms address, bank reference, phone number etc., and this information is forwarded via the State Department of Agriculture to the Foreign Agricultural Service of the United States Department of Agriculture for compilation in the monthly newsletter and translation into various languages. This Newsletter then goes to Agricultural attachés, who in turn distribute the information to the food trade in their country(ies) of responsibility. The major emphasis of this program is on new exporters and/or new export products.

INSPECTION & REGULATORY SERVICES - James M. Cassidy

The Federal-State Inspection Service issues U.S.D.A. inspection certificates on shipments of fruit and vegetables at shipping points and local processing plants. These certificates which certify grade, quality, condition and size of the products are done on a prescribed fee basis and are payed by the applicant or shipper. Inspections are also made at wholesale markets and retail stores in order to insure the correct labeling and grading of apples, potatoes, seed, feed, pet food, and fertilizers. Inspectors also check to enforce the "native law", which requires the state of origin to be used whenever the word "native" is displayed.

The program provides for inspection and regulation of controlled atmosphere apple storage rooms, cider mills and roadside stands.

The annual registration of seed, feed, and fertilizer with the collections of fees and penalties and the administration of the related laws, including cooperative work with the U.S.D.A. and the F.D.A., is part of this overall program.

FINANCIAL REPORT

The Division Budget appropriated for fiscal year 1981 was $334,908, which was $60,192 less than the fiscal year 1980 budget.

Calendar Year *

SEED INSPECTION PROGRAM/OFFICIAL TESTED

	1977	1978	1979	1980
Agriculture	72	62	37	54
Mixtures (lawn)	97	86	103	100
Vegetables	509	477	528	445
Flowers	250	206	132	173
Flower Mixture	5	4	3	0
	934	835	803	772

Stop sale orders 32 covering 96 lots of seed - poor germination, noxious weeds, unfit for seeding.

FRUIT & VEGETABLE INSPECTION REVENUE

	1977	1978	1979	1980
Apples	$9,812.07	$10,061.74	$16,090.07	$11,084.50
Cranberries	245.32	-------	577.00	-------
Onions	3,374.20	2,979.96	1,741.96	219.10
Potatoes	8,862.26	3,251.25	4,411.57	826.68
	$22,293.91	$16,292.95	$22,820.60	$12,130.28

FEED, FERTILIZER AND LIME REGISTRATION

	1977	1978	1979	1980
Feed/a	1,929	2,008	2,014	1,922
Fertilizer/b	658	697	799	732
Fertilizer/c	15	14	14	12
Lime	25	29	24	31

FEED, FERTILIZER AND LIME REVENUE

	1977	1978	1979	1980
Feed/a	$48,225.00	$51,900.00	$50,350.00	$48,050.00
Fertilizer/b	16,450.00	18,200.00	20,125.00	18,300.00
Fertilizer/c	1,875.00	1,750.00	1,750.00	1,500.00
Lime/d	625.00	725.00	600.00	775.00
Fertilizer/e	8,344.77	8,849.90	10,826.73	15,722.29
Fertilizer/f	3,029.98	2,197.10	1,348.81	3,929.57
Total	$78,549.00	$83,422.00	$85,000.54	$88,276.86

/a Brands
/b Specialty brands
/c Commercial plants
/d Brands
/e Tonnage
/f Penalties

*Statistics and revenue are collected on a calendar year.

Revenue generated by inspection and registration fees totaled $100,407.14.

The 1981 Legislature took direct action - which taken together with administrative thrust - transfers the functions of the Division into the newly created Division of Regulatory Services in attempts to streamline the operation of the entire Department of Food & Agriculture. Budget cuts reduced the staff from ten persons to five charged with the responsibilities of enforcing the milk control laws set forth in Chapters 94 & 94A of the General Laws.

In a subsequent move, the three Member Commission voted to remain as a standby, advisory board rendering help and assistance wherever needed.

After many years of outstanding public service on the board, Commissioner Richard Bonneville of South Hadley - a true leader in the milk field as a dealer - announced his retirement.

Counsel was most active in the course of the year in activity before the Legislature, providing expert testimony in favor of the Agri-Bond Bill of great concern to ALL farmers and food processors in an era of tough financing and prohibitive interest rates. Passage is deemed essential.

In adjudicatory and administrative procedures, and in litigation before the Superior Court, decisions are sustained and enforced as to the ongoing battle against predatory pricing and to sustain the priority of Massachusetts produced milk in certain situations permitted by law.

Reorganization in bankruptcy of the third largest dairy in the state has tested the resources of the State, the staff, and also strained to the utmost the farmers of the state. With the cooperation and assignment of the United States Court, efforts were successful in keeping this large employer and supplier on an operating and recuperating basis.

Partly through its efforts, the Milk Control staff is able to announce and confirm that milk sells to the 6,000,000 Massachusetts consumers at about the Lowest price of any state in the country!

Our agency of State government licenses all retail outlets of milk and last year more than 3,500 stores were licensed - ranging from the large supermarket chains to the so-called "mom and pop" stores.

PESTICIDE PROGRAM

Lewis F. Wells, Jr., Program Supervisor

Regulation of pesticides in Massachusetts is carried out under authority granted by Chapter 132B of the General Laws. Control of the use and application of pesticides is vested in the Department of Food and Agriculture.

The Pesticide Board which is chaired by the Commissioner of Food and Agriculture has three functions: (1) Providing advice to the Department of Food and Agriculture as to policy relative to the implementation of the Massachusetts Pesticide Control Act (Chapter 132B), (2) Approving of all regulations promulgated by the Department and, (3) Acting as an appeal body accessible to any person agrieved by an action of the Department as it enforces the law and its rules and regulations which pertain to pesticides. The registration of pesticide products and the issuance of experimental permits are the responsibility of a subcommittee of the Pesticide Board.

The Pesticide Program is concerned, to a great extent, with day to day regulatory functions: licensing, inspection, investigation, and the taking of enforcement action when indicated. The program staff also acts as the administrative and technical staff of the Pesticide Board and the subcommittee of that Board and provides technical consultation to other state agencies, municipalities, and to the general public. The latter function, although not specifically found in the law, fills a great need in this time of rapidly changing knowledge and attitudes as regards pesticides and their effects on humans and other components of the environment. The focus of the staff's activities in this regard is first to aid in the determination of whether or not pesticide use is indicated. If pesticide use is indicated, those pesticide uses which are legally possible under the circumstances at hand are discussed. Finally, advice is given as to which of such uses are most suitable for the situation at hand and what precautions or operational proceedures will be likely to minimize the environmental impact of those pesticides which are used.

This technical consultation function of the Pesticide Program is as valuable as the enforcement aspects of the total program whose major goal is to change the pattern of pesticide use so as to lessen environmental impact.

During Fiscal Year 1981, the wide scope of the program's actions included the following:

1. 3649 persons were certified to apply or supervise the application of restricted pesticides.

2. 577 persons were licensed to apply general use pesticides to land of another for hire or to apply restricted pesticides in such circumstances under the direct supervision of certified persons.

3. 115 persons were licensed as dealers in restricted pesticides.

4. 197 inspections and investigations of pesticides incidents were carried out.

5. 24 enforcement actions were taken.

The following data summarize the enforcement aspects of the program:

INSPECTION AND INVESTIGATION	PROJECTED	ACTUAL
Use	25	54
Producer	30	35
Marketplace	30	108
Imports	3	-
Special Regulation	4	-

SAMPLES COLLECTED	PROJECTED	ACTUAL
Use	75	91
Producer	30	57
Marketplace	30	4
Imports	-	-
Special Registrations	-	-

ENFORCEMENT ACTIONS TAKEN		
Administrative Orders	-	23
Civil or Criminal Actions	-	1
Licensure Revocation	-	-

The Pesticide Program budget in fiscal year 1981 was as follows:

State Appropriations	$ 86,745
Federal Grant Funds	
Certification of Applicators of Restricted Pesticides	$ 31,496
Enforcement	$ 18,305
Total Funds Available	$ 136,546

In fiscal year 1982, the level of funding from federal sources in the certification program will fall to approximately $15,000. The federal funding for fiscal year 1982 for enforcement activities will rise to approximately $213,082.

Federal grant periods do not coincide with state budget years; therefore, the enforcement grant figures for fiscal year 1982 include payments to UMass Medical Center for laboratory services rendered in our fiscal year 1981 as well as grant money transferred to the Office of the Attorney General for legal services rendered to this program during the same period.

PLANT PEST CONTROL DIVISION
Peter C. Kuzmiski, Director

Each year the hazards of spreading potential pests on plants and plant products seem to be increasing. The movement of plants between domestic and foreign areas has become commonplace. Travel time now between global areas has diminished to the point where pests of exotic origin can land here in the matter of a few hours. This jet age of travel has made it imperative that new methods of pest detection and control continue to be developed to protect our agricultural and environmental plant production.

The inspection of plants in nurseries throughout the Commonwealth is a primary function of the Division. Growing plants are examined to ensure that they are free from injurious plant pests. Nursery inspection allows the plants to enter interstate commerce and to compete in fair trade. Early detection of a pest problem will help to prevent its spread within the nursery, allowing controls to be applied before the condition becomes a major problem. Also, healthy, true-to-name, and pest free plants are guaranteed to the consumer as a result of this inspection service.

Each year from 400 to 500 nurseries and greenhouses are inspected and certified. Plants bought and sold, but not grown by individuals or establishments, must also be certified through our nursery agents' license procedure. We have from 300 to 400 agents licensed annually.

Surveys or trapping is done to determine the presence or population density of insect pests. This year the Gypsy Moth was a very destructive pest to our woodland and ornamental trees. Over 2 million acres of defoliation was recorded this year. Again the ravages of this pest emphasize the importance of continuing the development of comprehensive methods of control, with less hazard to the environment. Surveys for this pest were made in and around nurseries during the summer and fall months. Trapping for a pest of lawns and gardens, (European Chafer) was conducted this year with no new finds. Strawberry and blueberry nurseries were also inspected for specific pests of these fruit plants.

Fruit plants that are closely watched are the currant and gooseberry. These plants act as an alternate host for a serious disease called White Pine Blister Rust. In order to prevent the spread of the causal fungus of this disease, the planting of currants or gooseberries is prohibited in certain cities and towns. There are 144 planting sites where this planting is prohibited. The presence of young White Pine stands determines the restrictions of planting in these areas. This is one of our active state plant quarantines that has been in effect since 1966 when the federal quarantine was discontinued and the state assumed the responsibility. This Division by statute has the sole authority to promulgate and enforce state plant quarantines.

Domestic and foreign plant quarantines are enforced by our personnel in collaboration with the U.S. Department of Agriculture. These quarantines involve the Gypsy Moth, Brown-Tail Moth, Japanese Beetle, Black Stem Rust, and Post Entry Quarantine. Surveys include Noxious Weeds, Pest Detection, and foreign plant export certification. The Gypsy Moth, Brown-Tail Moth and Japanese Beetle quarantines involve measures to prevent the artificial spread of the insects by inspecting and/or treating regulated articles that may help cause such spread. These articles may include plants, soil, outdoor furniture, vehicles, stone products, and any article capable of harbouring any form of the insect.

One of our beneficial insects is, of course, the honeybee. The inspection of honeybees for their freedom from contagious bee diseases is an important activity of the Division. Besides the production of honey and beeswax, the pollination of our food and fiber crops is the important contribution of this insect. Each year we inspect between 6000 and 7000 colonies of honeybees. Assistance is given to new beekeepers, if necessary, to promote good beekeeping practices. There are over 12,000 known colonies of honeybees in the state and this is a conservative figure, no doubt, as many colonies remain unknown due to the lack of a honeybee colony registration law. Legislation providing for the registering of beehives was again defeated this year.

Throughout the year, the Division is busy disseminating information to the public sector relating to many agricultural subjects. Inquiries regarding plant culture, pest control, pesticide use, plant and pest identification are common calls. Information is made available through the media, telephone, and personal visits. The Division maintains a regular weekly and monthly radio program.

Personnel include five permanent and as many as thirteen temporary employees. The budget to sustain the Division this year was $100,200.

MASSACHUSETTS DEPARTMENT OF FOOD AND AGRICULTURE - APIARY INSPECTION

ANNUAL STATISTICAL REPORT

SEASON 1981

COUNTY	NO. COLONY EXAMINED		NO. COLONY OWNED		NO. COLONY A.F.B.		NO. COLONY E.F.B.		NO. COLONY TREATED		NO. COLONY DESTROYED	
	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	
BARNSTABLE	73	-	73	-	3	-	0	-	0	-	0	
BERKSHIRE	0	-	0	-	0	-	0	-	0	-	0	
BRISTOL	159	202	180	202	4	1	7	8	0	-	0	
ESSEX	17	-	17	-	2	-	0	-	0	-	0	
FRANKLIN	46	-	60	-	0	-	0	-	0	-	0	
HAMPDEN	476	291	500	291	0	7	0	0	0	0	0	
HAMPSHIRE	374	239	374	239	23	11	1	2	0	0	0	
MIDDLESEX	3182	235	3182	344	42	24	64	0	30	0	0	
NORFOLK	462	-	462	-	40	-	8	-	4	-	0	
PLYMOUTH	469	173	589	296	50	33	39	3	41	0	0	
WORCESTER	1600	707	1580	713	16	32	2	2	10	0	0	
SUFFOLK	88	50	88	53	1	0	1	0	0	0	0	
TOTALS	6946	1897	7027	2138	181	107	122	15	85	0	0	

A.F.B. 1980 - 2.6% | A.F.B. 1981 - 5.6% | E.F.B. 1980 - 1.7% | E.F.B. 1981 - .7%

ESTIMATE NO. COLONIES IN MASSACHUSETTS 15,000

December 30, 1981

P.C. Kuzmiski, Director
Plant Pest Control

STATE RECLAMATION BOARD
John J. McColgan, Chairman

This year the State Reclamation Board welcomed Mr. Gilbert A. Bliss, Director of Forest and Parks, to the Board. Mr. Bliss is the third member of the Board representing the Department of Environmental Management.

The Reclamation Board had its hands full when the South Shore Mosquito Control Project was terminated. This mosquito control project was established as a voluntary trust; ten municipalities on the south shore area funded the project through voluntary contributions raised at town meetings. For the first time, the Reclamation Board had responsibility to liquidate a mosquito project. The monies received are being reimbursed to those member communities of the south shore with the satisfaction of the South Shore Commission.

During Fiscal 81, the Town of Lexington voted to re-enter the East Middlesex County Mosquito Control Project after voting out previous years. The Town of Wellesley opted to withdraw from the mosquito control project. Central Massachusetts Mosquito Control Project gained one city but lost four towns. The city of Leominster voted to be a member of the CMMCP and the Towns of Bolton, Hopkinton, Sterling, and Stow withdrew from the project.

The Town of Milton via letter of the Selectmen thanked the Norfolk County Mosquito Control Project for their effective efforts in fighting the mosquito populations. The Town of Milton withdrew, citing Proposition 2½ as the reason. NCMCP accepted the Town of Braintree as a member this year; previously, Braintree was a member of South Shore Mosquito Control Project.

The Town of Monterey received legislative approval to withdraw from Berkshire County Mosquito Control Project.

The Towns of Duxbury, Hingham, Hull, Norwell, and Scituate, previous members of the terminated South Shore Mosquito Control Project, entered the existing Plymouth County Mosquito Control Project. Again this year interest was expressed in a mosquito control project in the southwest area of Worcester County. The proposed legislation was not successful.

This year the Board voted and approved a policy statement in regards to aerial adulticide application for mosquito control. The policy statement provides guidelines to municipalities and mosquito control projects relative to sound pesticide choices for controlling mosquitoes. It would limit the use of certain registered pesticides during conditions that would warrant alternative choices. This year the Board sponsored two bills compatible with the above policy statement. One bill, an act relative to mosquito control by cities and towns in mosquito control projects or districts, was signed into law by Governor King. (Chapter 302 Acts and Resolves). This law allows municipalities within an organized mosquito control project to raise monies for mosquito abatement in addition to the amount assessed by the project. The mosquito control would be under the supervision of the mosquito control project.

Another bill (An Act Relative to Mosquito Control by cities and towns not in Mosquito Control or Districts) is still pending in the Ways and Means Committee. This bill will require Boards of Health to file annually on or before June 1st a detailed report of its proposed mosquito control program. The municipality may proceed with said mosquito control programs after approval by the Board.

Regarding the financing of the mosquito control projects; all mosquito control operation expended a little over $2,000,000 which was financed locally. Funding for the eight organized mosquito control districts is derived from a formula in legislation relative to total land area and finalized equalized valuation. East Middlesex Mosquito Control Project is a voluntary trust; it is funded by cities and towns who have elected to join them through town meetings on city council vote.

At the beginning of Fiscal Year 1981, weather conditions were favorable to management of mosquito populations, as were the very dry conditions which persisted through the latter part of the summer. Nonetheless, a great amount of mosquito work was performed by mosquito crews to complement the work nature had provided. During the Spring of Fiscal Year 1981, rainfall was not excessive but the pesky biting "springbrood" mosquitos were heavy in certain parts of the Commonwealth.

The budget of $47,000 covered the cost of the administrative work of the Board, services of regular employees of the Board, and necessary expenses incurred in overseeing the work of the nine mosquito control projects in operation during the year.

Throughout the year the Entomologist, Mark Buffone, provided information to the public relative to mosquito control programs, pesticides used for mosquito control, and identification of various pests. The Entomologist collaborated with various agencies, especially the Pesticide Board, on matters concerning mosquito control. The Reclamation Board's affiliation with the University of Massachusetts via the Extension Biting Fly Specialist has been a continued asset.

This year, a special effort was pursued by the East Middlesex Mosquito Control Project to investigate the new microbial insecticide called Bacillus Thuringiensis isaelensis via large scale aerial applications in cooperation with the Division of Fisheries and Wildlife. This unique biological insecticide is looking good in regards to effectiveness and safety to the environment.

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